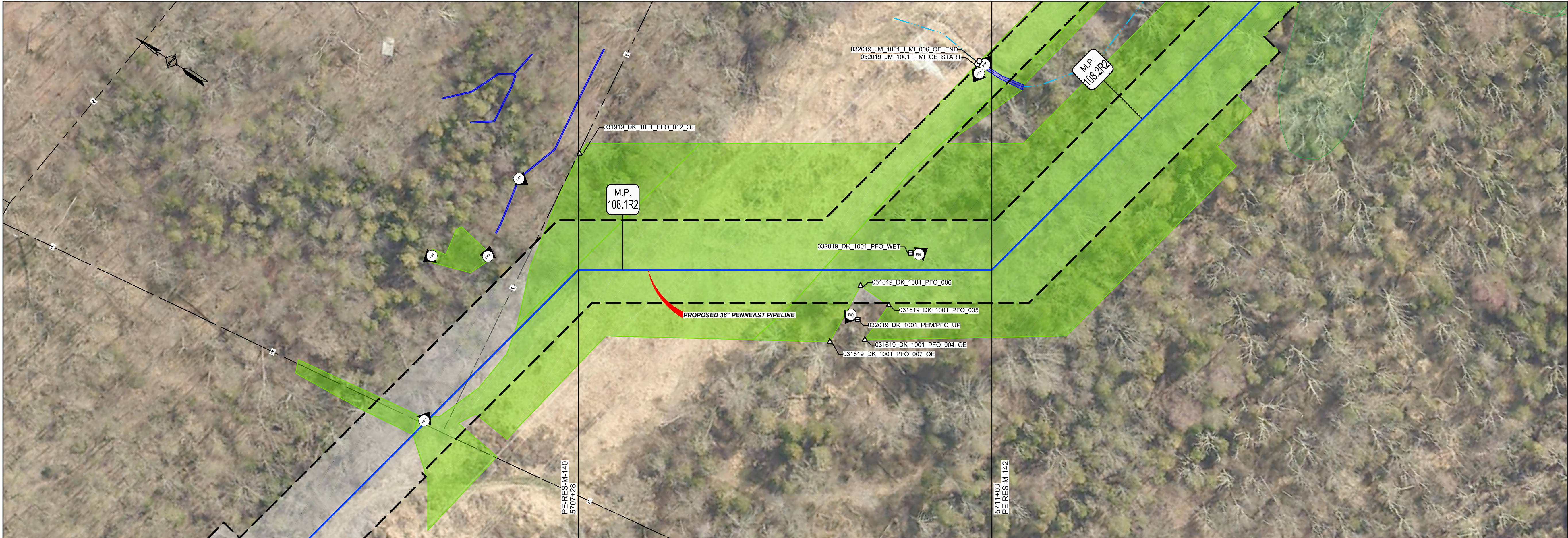
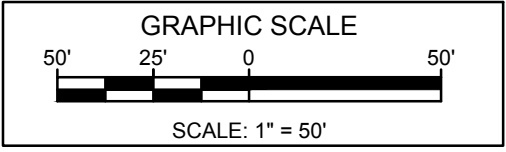
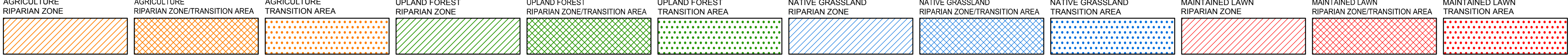


RIPIARIAN ZONE/TRANSITION
AREA RESTORATION
CATEGORIES



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 - RESTORATION METHODS AND HATCHING SHOWN ON PLANS PROVIDED BY AMY S. GREENE ENVIRONMENTAL CONSULTANTS.

REFERENCE DRAWINGS	
DWG. NO.	TITLE

REVISIONS	
NO.	REVISIONS
0	ISSUED FOR NJDEP PERMIT

APPROVALS	
DRAWN BY	DATE
RJP	7/2019
CHECKED BY	DATE
KEK	7/2019
ENG. APPROVAL	DATE
MJD	7/2019
P.M. APPROVAL	DATE
MW	7/2019

APPROVALS	
DRAWN BY	DATE
RJP	7/2019
CHECKED BY	DATE
KEK	7/2019
ENG. APPROVAL	DATE
MJD	7/2019
P.M. APPROVAL	DATE
MW	7/2019

PREPARED FOR	
PREPARED BY	
111 WOOD AVENUE SOUTH, ISELIN, NJ, 08830 CERTIFICATE NO. 24G28016800	

PENNEAST PIPELINE PROJECT		
PENNEAST PIPELINE RESTORATION PERMIT PLAN MP 108.1R2 - MP 108.2R2		
SCALE	DRAWING NO.	REVISION
1" = 50'	PE-RES-M-141	0

LEGEND

- PROPOSED PIPELINE
- LIMITS OF DISTURBANCE
- PROPOSED PERMANENT EASEMENT
- OPERATIONAL CORRIDOR
- PROPOSED TREE LINE (DURING CONSTRUCTION AND BEFORE RESTORATION)
- EXISTING TREE LINE
- WETLAND (SURVEYED)
- WETLAND (PUBLIC)
- PEM WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
- PSS WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
- PFO WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
- MODAG WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
- WATERBODY (SURVEYED)
- WATERBODY (PUBLIC)
- WATERBODY - TO BE RESTORED
- TRANSITION AREA
- RIPIARIAN BUFFER (OUTER LIMITS ONLY)
- STREAM CENTERLINE (SURVEYED)
- STREAM CENTERLINE (PUBLIC)
- LIMITS OF WETLAND DELINEATION
- PROPERTY LINE
- PARCEL ID WITH BLOCK AND LOT NUMBER
- EXISTING CULVERT
- CORRUGATED PLASTIC PIPE
- CORRUGATED METAL PIPE
- HDPE
- PVC
- RCP
- UNKNOWN
- EXISTING FOREIGN UTILITY EASEMENT
- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- EXISTING PIPELINE
- EXISTING OVERHEAD LINE
- EXISTING TREE
- EXISTING FENCE
- WETLAND FLAG NO.
- WETLAND FLAG
- SAMPLE STATION
- SAMPLE STATION
- STATE OPEN WATER FLAG
- PHOTO LOCATION (SEE REPORT)

NOTES FOR WETLAND RESTORATION:

PEM WETLANDS IMPACTED WILL BE RESTORED AS PEM WETLANDS*

PSS WETLANDS WITHIN THE LIMITS OF DISTURBANCE AND OUTSIDE THE OPERATIONAL CORRIDOR WILL BE RESTORED AS PSS WETLANDS. PSS WETLANDS WITHIN THE OPERATIONAL CORRIDOR WILL BE RESTORED AS PEM WETLANDS.

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MODAG WETLANDS IMPACTED WILL BE RESTORED AS MODAG WETLANDS.

I AM A DULY REGISTERED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT EXISTING CONDITIONS SHOWN WERE FIELD LOCATED AND PREPARED UNDER MY DIRECT SUPERVISION.

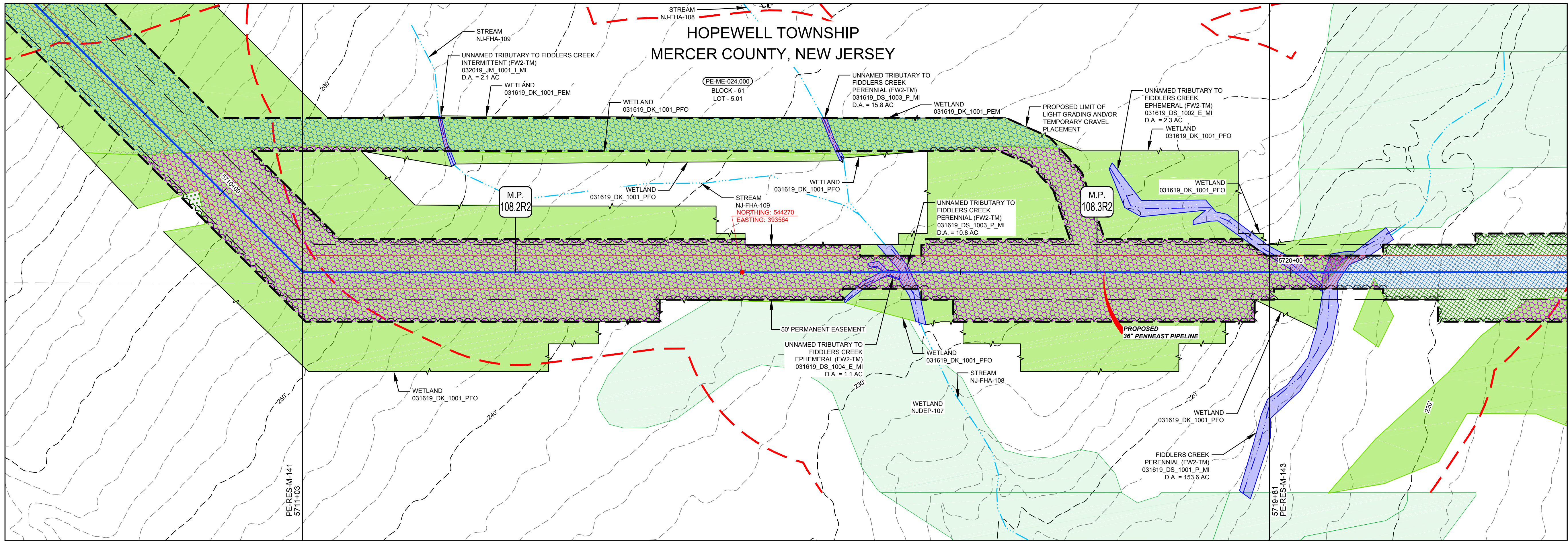
THOMAS D. STRONG
PROFESSIONAL LAND SURVEYOR
N.J. LIC. NO. 24G503676100

08/01/2019
SIGNATURE DATE

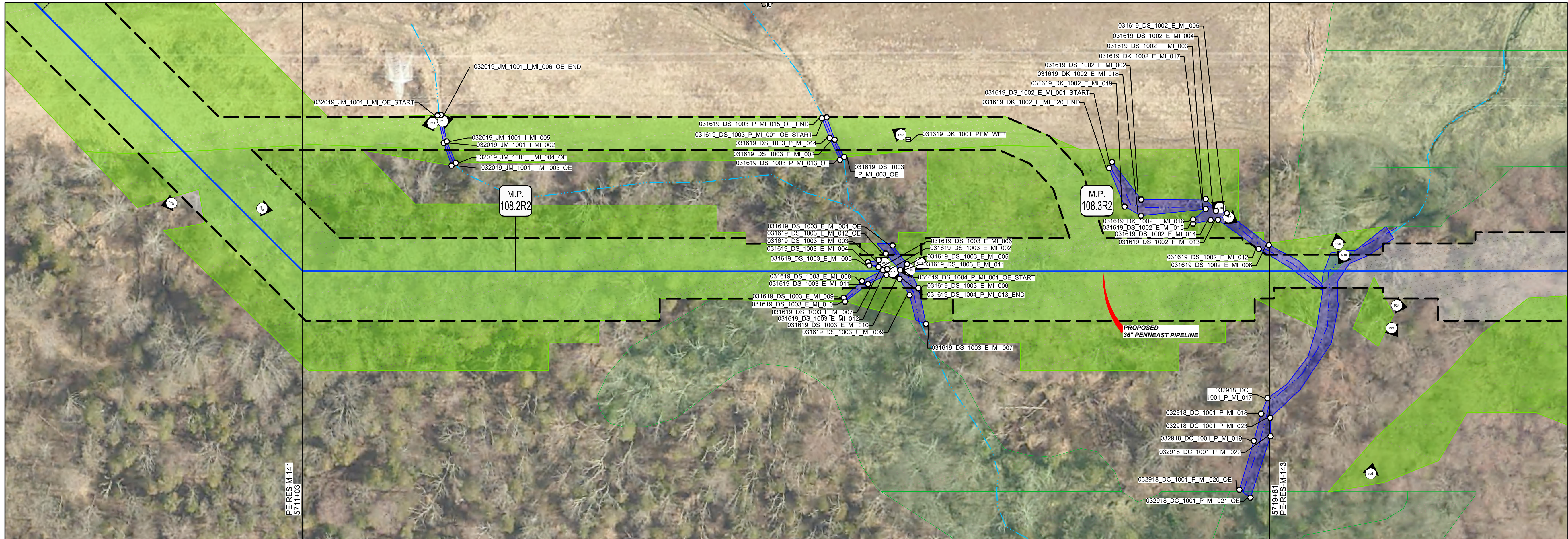
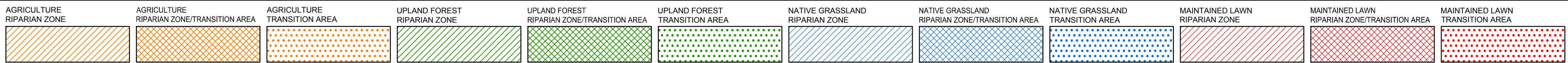
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MICHAEL J. DENICHILO
PROFESSIONAL ENGINEER
N.J. LIC. NO. 24G5078700

08/01/2019
SIGNATURE DATE



RIPIARIAN ZONE/TRANSITION
AREA RESTORATION
CATEGORIES



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REFERENCE DRAWINGS		NO.		REVISIONS		DATE		DRAWN		CK		APPR	
DWG. NO.	TITLE												
		0		ISSUED FOR NJDEP PERMIT		7/2019		RJP		KEK		MJD	

APPROVALS		DATE	
DRAWN BY	RJP	7/2019	
CHECKED BY	KEK	7/2019	
ENG. APPROVAL	MJD	7/2019	
P.M. APPROVAL	MW	7/2019	

APPROVALS		DATE	
DRAWN BY	RJP	7/2019	
CHECKED BY	KEK	7/2019	
ENG. APPROVAL	MJD	7/2019	
P.M. APPROVAL	MW	7/2019	

PREPARED FOR		DATE	
PennEast PIPELINE		7/2019	
CLIENT APPROVAL		DATE	
PREPARED BY	M MOTT MACDONALD	DATE	
111 WOOD AVENUE SOUTH, ISELIN, NJ, 08830			
CERTIFICATE NO. 24GA28016800			

LEGEND

PROPOSED PIPELINE

LIMITS OF DISTURBANCE

PROPOSED PERMANENT EASEMENT

OPERATIONAL CORRIDOR

PROPOSED TREE LINE
(DURING CONSTRUCTION AND BEFORE RESTORATION)

EXISTING TREE LINE

WETLAND (SURVEYED)

WETLAND (PUBLIC)

PEM WETLAND - TO BE RESTORED
(SEE NOTES FOR WETLAND RESTORATION BELOW)

PSS WETLAND - TO BE RESTORED
(SEE NOTES FOR WETLAND RESTORATION BELOW)

PFO WETLAND - TO BE RESTORED
(SEE NOTES FOR WETLAND RESTORATION BELOW)

MODAG WETLAND - TO BE RESTORED
(SEE NOTES FOR WETLAND RESTORATION BELOW)

WATERBODY (SURVEYED)

WATERBODY (PUBLIC)

WATERBODY - TO BE RESTORED

TRANSITION AREA

RIPIARIAN BUFFER (OUTER LIMITS ONLY)

STREAM CENTERLINE (SURVEYED)

STREAM CENTERLINE (PUBLIC)

LIMITS OF WETLAND DELINEATION

PROPERTY LINE

(LB-HU-A001.000)
BLOCK - 1
LOT - 10.00

EXISTING CULVERT

CORRUGATED PLASTIC PIPE

CMP

CORRUGATED METAL PIPE

HDPE

HIGH DENSITY POLYETHYLENE PIPE

PVC

POLYVINYL CHLORIDE PIPE

RCP

REINFORCED CONCRETE PIPE

UNK

UNKNOWN

EXISTING FOREIGN UTILITY EASEMENT

1260'

EXISTING MAJOR CONTOURS

EXISTING MINOR CONTOURS

EXISTING PIPELINE

OH

EXISTING OVERHEAD LINE

EXISTING TREE

EXISTING FENCE

WETLAND FLAG NO. 1

WETLAND FLAG

SAMPLE STATION

SAMPLE STATION

SOW_FLAG_NO. 1

STATE OPEN WATER FLAG

PHOTO LOCATION (SEE REPORT)

NOTES FOR WETLAND RESTORATION:

PEM WETLANDS IMPACTED WILL BE RESTORED AS PEM WETLANDS*

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THOMAS D. STRONG
PROFESSIONAL LAND SURVEYOR
N.J. LIC. NO. 24GS03676100

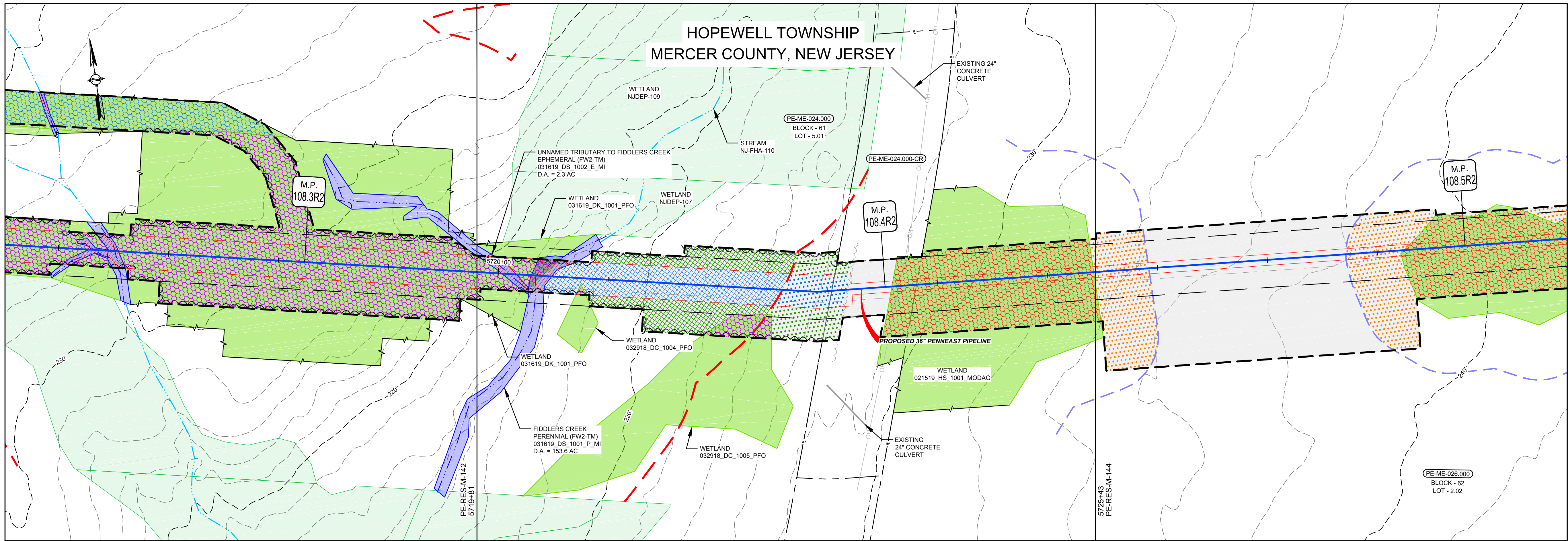
SIGNATURE: *Thomas D. Strong* DATE: 08/01/2019

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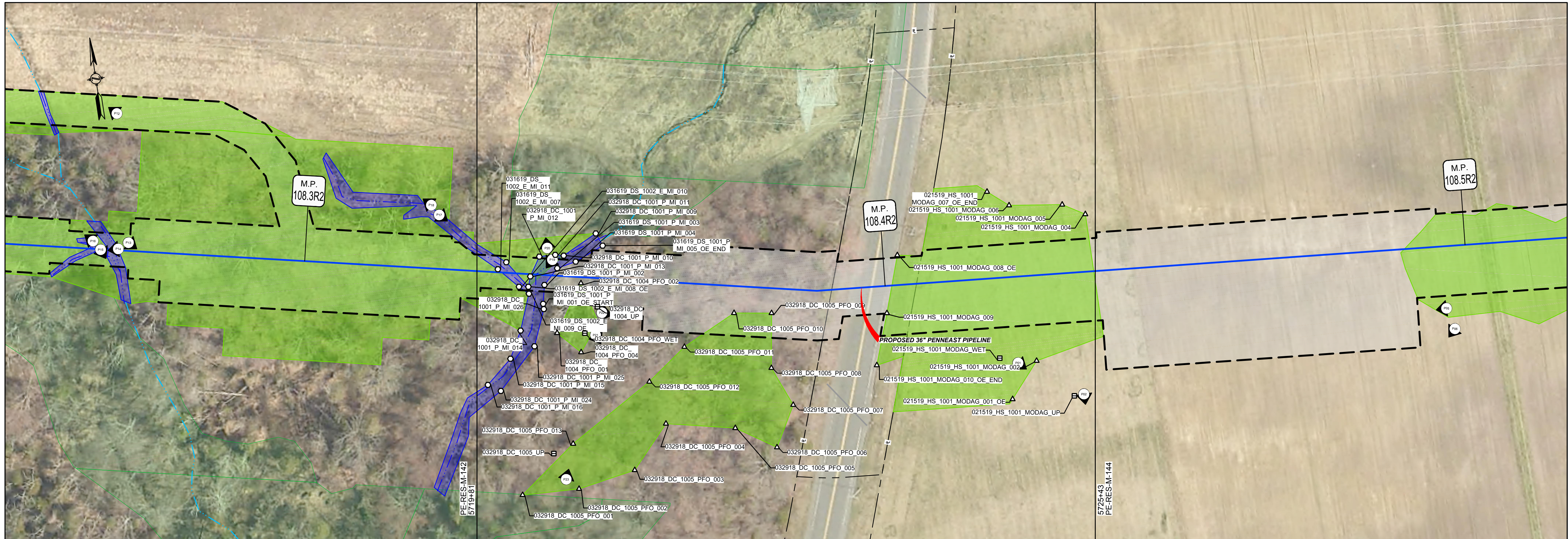
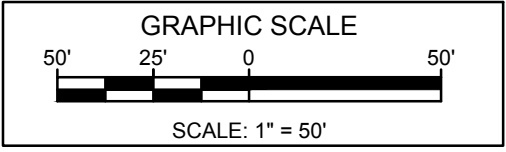
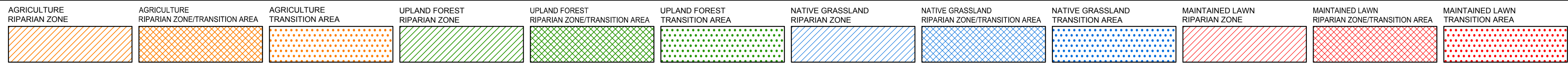
MICHAEL J. DENICHILO
PROFESSIONAL ENGINEER
N.J. LIC. NO. 24GE05078700

SIGNATURE: *Michael J. Denichilo* DATE: 08/01/2019

PENNEAST PIPELINE PROJECT		
PENNEAST PIPELINE RESTORATION PERMIT PLAN MP 108.2R2 - MP 108.3R2		
SCALE	DRAWING NO.	REVISION
1" = 50'	PE-RES-M-142	0



RIPARIAN ZONE/TRANSITION AREA RESTORATION CATEGORIES



LEGEND

PROPOSED PIPELINE
LIMITS OF DISTURBANCE
PROPOSED PERMANENT EASEMENT
OPERATIONAL CORRIDOR
PROPOSED TREE LINE (DURING CONSTRUCTION AND BEFORE RESTORATION)
EXISTING TREE LINE
WETLAND (SURVEYED)
WETLAND (PUBLIC)
PEM WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
PSS WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
PFO WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
MODAG WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
WATERBODY (SURVEYED)
WATERBODY (PUBLIC)
WATERBODY - TO BE RESTORED
TRANSITION AREA
RIPARIAN BUFFER (OUTER LIMITS ONLY)
STREAM CENTERLINE (SURVEYED)
STREAM CENTERLINE (PUBLIC)
LIMITS OF WETLAND DELINEATION
PROPERTY LINE
PARCEL ID WITH BLOCK AND LOT NUMBER
EXISTING CULVERT
CORRUGATED PLASTIC PIPE
CORRUGATED METAL PIPE
HDPE
PVC
RCP
UNK
EXISTING FOREIGN UTILITY EASEMENT
EXISTING MAJOR CONTOURS
EXISTING MINOR CONTOURS
EXISTING PIPELINE
EXISTING OVERHEAD LINE
EXISTING TREE
EXISTING FENCE
WETLAND FLAG NO. 1
SAMPLE STATION
SOW FLAG NO. 1
STATE OPEN WATER FLAG
PHOTO LOCATION (SEE REPORT)

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THOMAS D. STRONG
PROFESSIONAL LAND SURVEYOR
N.J. LIC. NO. 24GS03676100

SIGNATURE: *Thomas D. Strong* DATE: 08/01/2019

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MICHAEL J. DENICHILO
PROFESSIONAL ENGINEER
N.J. LIC. NO. 24GE05078700

SIGNATURE: *Michael J. Denichilo* DATE: 08/01/2019

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REFERENCE DRAWINGS		NO.		REVISIONS			
DWG. NO.	TITLE	NO.	ISSUED FOR NJDEP PERMIT	DATE	DRAWN	CK	APPR
		0		7/2019	RJP	KEK	MJD

APPROVALS	
DRAWN BY	DATE
RJP	7/2019
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APPROVALS	
CLIENT APPROVAL	DATE
	7/2019

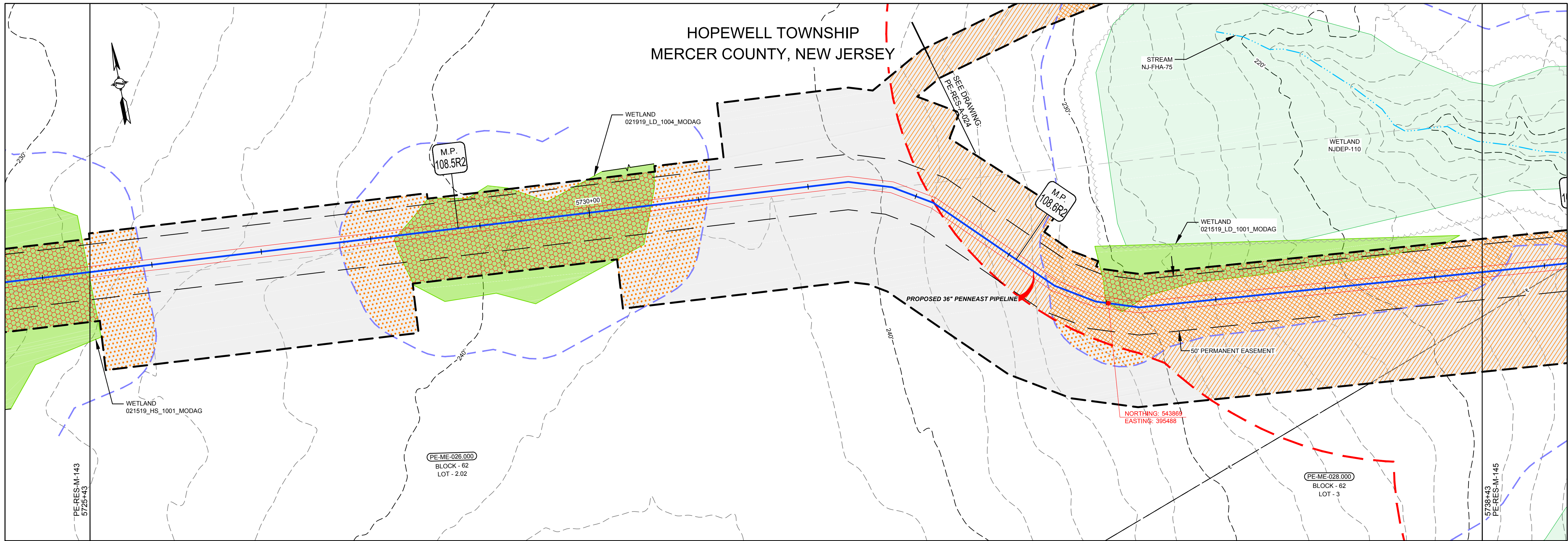
PREPARED FOR

PennEast
PIPELINE

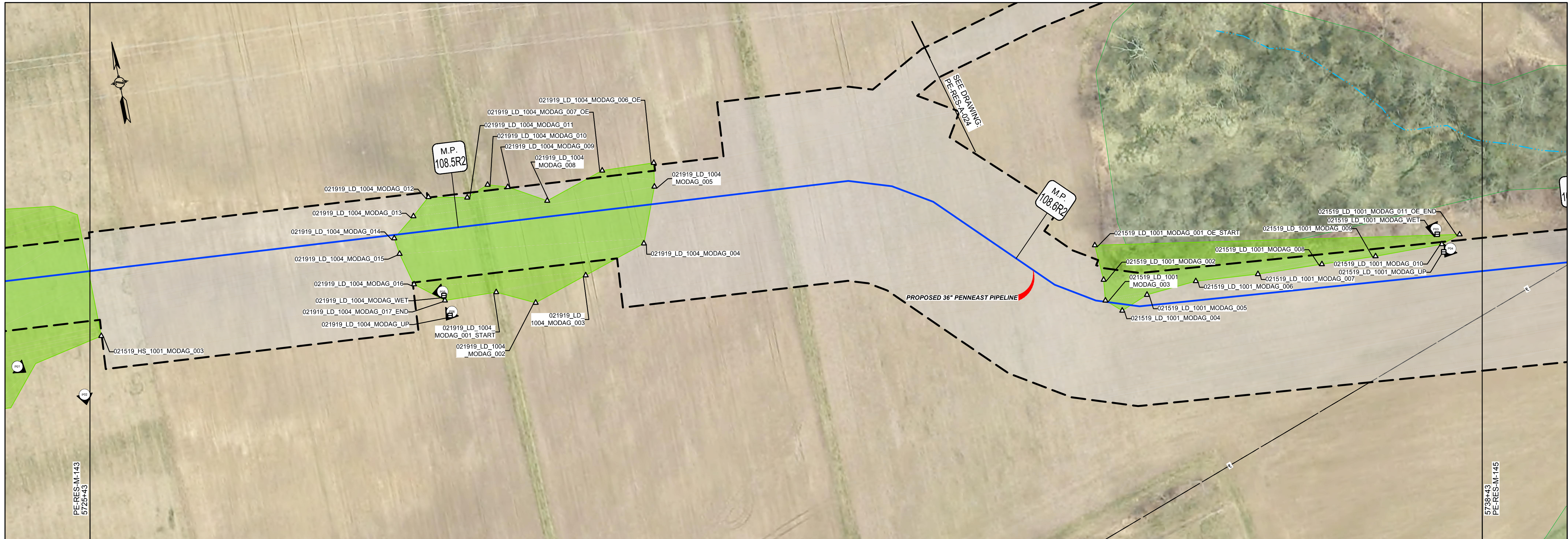
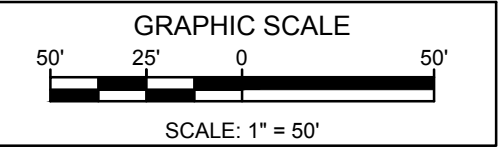
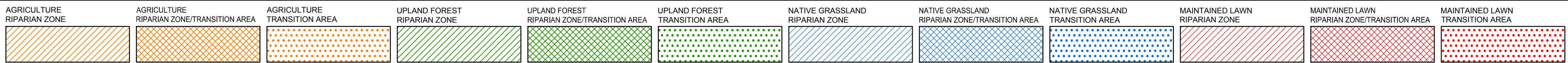
PREPARED BY

MOTT MACDONALD
111 WOOD AVENUE SOUTH, ISELIN, NJ, 08830
CERTIFICATE NO. 24GA28016800

PENNEAST PIPELINE PROJECT		
PENNEAST PIPELINE RESTORATION PERMIT PLAN MP 108.3R2 - MP 108.4R2		
SCALE	DRAWING NO.	REVISION
1" = 50'	PE-RES-M-143	0



RIPARIAN ZONE/TRANSITION AREA RESTORATION CATEGORIES



LEGEND

- PROPOSED PIPELINE
- LIMITS OF DISTURBANCE
- PROPOSED PERMANENT EASEMENT
- OPERATIONAL CORRIDOR
- PROPOSED TREE LINE (DURING CONSTRUCTION AND BEFORE RESTORATION)
- EXISTING TREE LINE
- WETLAND (SURVEYED)
- WETLAND (PUBLIC)
- PEM WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
- PSS WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
- PFO WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
- MODAG WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
- WATERBODY (SURVEYED)
- WATERBODY (PUBLIC)
- WATERBODY - TO BE RESTORED
- TRANSITION AREA
- RIPARIAN BUFFER (OUTER LIMITS ONLY)
- STREAM CENTERLINE (SURVEYED)
- STREAM CENTERLINE (PUBLIC)
- LIMITS OF WETLAND DELINEATION
- PROPERTY LINE
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- CORRUGATED PLASTIC PIPE
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- HDPE
- HIGH DENSITY POLYETHYLENE PIPE
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- POLYVINYL CHLORIDE PIPE
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- REINFORCED CONCRETE PIPE
- UNK
- UNKNOWN
- EXISTING FOREIGN UTILITY EASEMENT
- 1260'
- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- EXISTING PIPELINE
- OH
- EXISTING OVERHEAD LINE
- EXISTING TREE
- EXISTING FENCE
- WETLAND FLAG NO.
- WETLAND FLAG
- SAMPLE STATION
- SAMPLE STATION
- SOW_FLAG_NO.
- STATE OPEN WATER FLAG
- PHOTO LOCATION (SEE REPORT)

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PROFESSIONAL LAND SURVEYOR
N.J. LIC. NO. 24G503676100

Thomas D. Strong 08/01/2019
SIGNATURE DATE

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Michael J. Denichilo 08/01/2019
SIGNATURE DATE

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REFERENCE DRAWINGS		NO.		REVISIONS			
DWG. NO.	TITLE	NO.		REVISIONS	DATE	DRAWN	CK
000-03-03-079.2	* ACCESS ROAD DETAIL	0		ISSUED FOR NJDEP PERMIT	7/2019	RJP	KEK

APPROVALS				APPROVALS			
DRAWN BY	DATE	DRAWN BY	DATE	DRAWN BY	DATE	DRAWN BY	DATE
RJP	7/2019	RJP	7/2019	RJP	7/2019	RJP	7/2019
CHECKED BY	DATE	CHECKED BY	DATE	CHECKED BY	DATE	CHECKED BY	DATE
KEK	7/2019	KEK	7/2019	KEK	7/2019	KEK	7/2019
ENG. APPROVAL	DATE	ENG. APPROVAL	DATE	ENG. APPROVAL	DATE	ENG. APPROVAL	DATE
MJD	7/2019	MJD	7/2019	MJD	7/2019	MJD	7/2019
P.M. APPROVAL	DATE	P.M. APPROVAL	DATE	P.M. APPROVAL	DATE	P.M. APPROVAL	DATE
MW	7/2019	MW	7/2019	MW	7/2019	MW	7/2019

APPROVALS		APPROVALS	
DRAWN BY	DATE	DRAWN BY	DATE
RJP	7/2019	RJP	7/2019
CHECKED BY	DATE	CHECKED BY	DATE
KEK	7/2019	KEK	7/2019
ENG. APPROVAL	DATE	ENG. APPROVAL	DATE
MJD	7/2019	MJD	7/2019
P.M. APPROVAL	DATE	P.M. APPROVAL	DATE
MW	7/2019	MW	7/2019

APPROVALS		APPROVALS	
DRAWN BY	DATE	DRAWN BY	DATE
RJP	7/2019	RJP	7/2019
CHECKED BY	DATE	CHECKED BY	DATE
KEK	7/2019	KEK	7/2019
ENG. APPROVAL	DATE	ENG. APPROVAL	DATE
MJD	7/2019	MJD	7/2019
P.M. APPROVAL	DATE	P.M. APPROVAL	DATE
MW	7/2019	MW	7/2019

PREPARED FOR

PennEast
PIPELINE

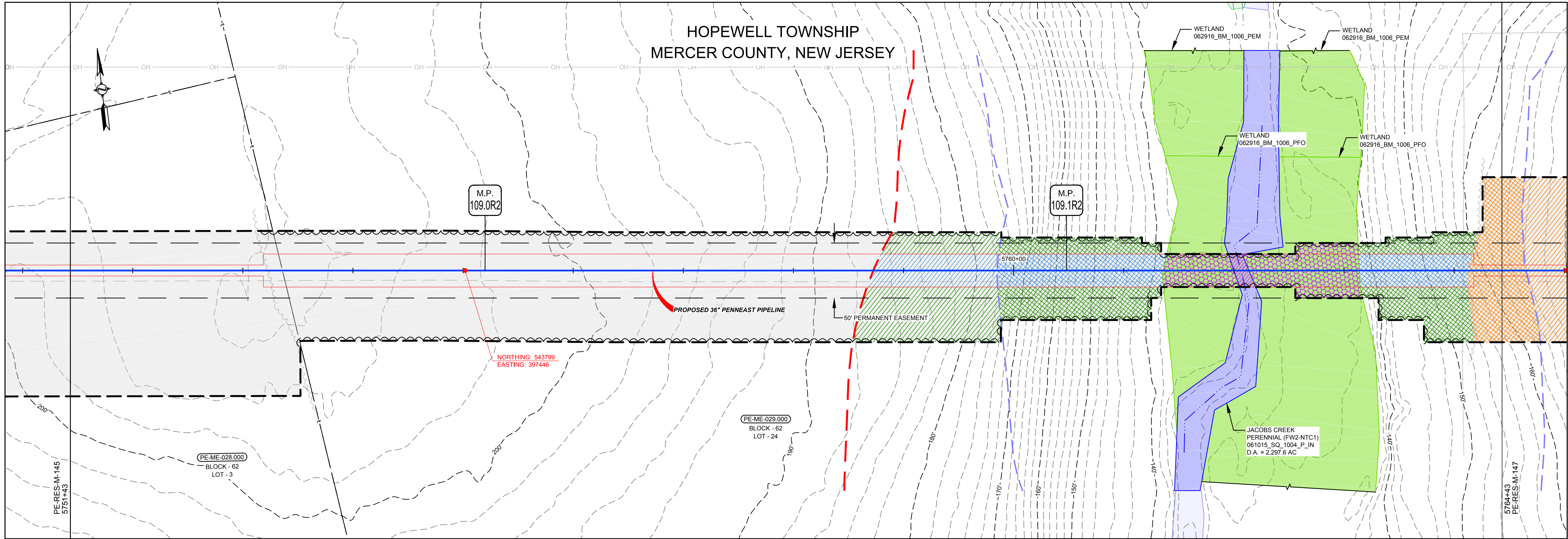
PREPARED BY

M M
MOTT
MACDONALD

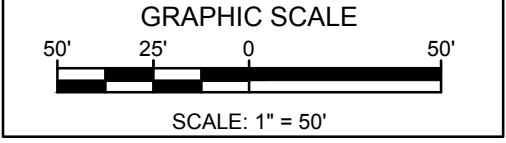
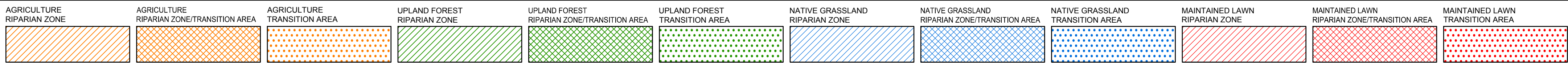
111 WOOD AVENUE SOUTH, ISELIN, NJ, 08830
CERTIFICATE NO. 24GA28016800

PENNEAST PIPELINE PROJECT		
PENNEAST PIPELINE RESTORATION PERMIT PLAN MP 108.4R2 - MP 108.7R2		
SCALE	DRAWING NO.	REVISION
1" = 50'	PE-RES-M-144	0

PENNEAST PIPELINE PROJECT		
<p align="center">PENNEAST PIPELINE RESTORATION PERMIT PLAN MP 108.7R2 - MP 108.9R2</p>		
SCALE	DRAWING NO.	REVISION
1" = 50'	PE-RES-M-145	0



RIPIARIAN ZONE/TRANSITION AREA RESTORATION CATEGORIES



LEGEND

- PROPOSED PIPELINE
- LIMITS OF DISTURBANCE
- PROPOSED PERMANENT EASEMENT
- OPERATIONAL CORRIDOR
- PROPOSED TREE LINE (DURING CONSTRUCTION AND BEFORE RESTORATION)
- EXISTING TREE LINE
- WETLAND (SURVEYED)
- WETLAND (PUBLIC)
- PEM WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
- PSS WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
- PFO WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
- MODAG WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
- WATERBODY (SURVEYED)
- WATERBODY (PUBLIC)
- WATERBODY - TO BE RESTORED
- TRANSITION AREA
- RIPIARIAN BUFFER (OUTER LIMITS ONLY)
- STREAM CENTERLINE (SURVEYED)
- STREAM CENTERLINE (PUBLIC)
- LIMITS OF WETLAND DELINEATION
- PROPERTY LINE
- PARCEL ID WITH BLOCK - 1 LOT - 10.00
- EXISTING CULVERT
- CORRUGATED PLASTIC PIPE
- CMP
- CORRUGATED METAL PIPE
- HDPE
- HIGH DENSITY POLYETHYLENE PIPE
- PVC
- POLYVINYL CHLORIDE PIPE
- RCP
- REINFORCED CONCRETE PIPE
- UNK
- UNKNOWN
- EXISTING FOREIGN UTILITY EASEMENT
- 1280'
- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- EXISTING PIPELINE
- OH
- EXISTING OVERHEAD LINE
- EXISTING TREE
- EXISTING FENCE
- WETLAND FLAG NO.
- WETLAND FLAG
- SAMPLE STATION
- SAMPLE STATION
- SOW_FLAG_NO.
- STATE OPEN WATER FLAG
- PHOTO LOCATION (SEE REPORT)

NOTES FOR WETLAND RESTORATION:

PEM WETLANDS IMPACTED WILL BE RESTORED AS PEM WETLANDS*

PSS WETLANDS WITHIN THE LIMITS OF DISTURBANCE AND OUTSIDE THE OPERATIONAL CORRIDOR WILL BE RESTORED AS PSS WETLANDS. PSS WETLANDS WITHIN THE OPERATIONAL CORRIDOR WILL BE RESTORED AS PEM WETLANDS.

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MODAG WETLANDS IMPACTED WILL BE RESTORED AS MODAG WETLANDS.

I AM A DULY REGISTERED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT EXISTING CONDITIONS SHOWN WERE FIELD LOCATED AND PREPARED UNDER MY DIRECT SUPERVISION.

THOMAS D. STRONG
PROFESSIONAL LAND SURVEYOR
N.J. LIC. NO. 24GS03676100

SIGNATURE: *Thomas D. Strong* DATE: 08/01/2019

I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT THE PROPOSED ENVIRONMENTAL DISTURBANCES SHOWN ARE ACCURATE AND CORRESPOND WITH THE DETAILED ENGINEERING DRAWINGS.

MICHAEL J. DENICHILO
PROFESSIONAL ENGINEER
N.J. LIC. NO. 24GE05078700

SIGNATURE: *Michael J. Denichilo* DATE: 08/01/2019

- NOTES:
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REFERENCE DRAWINGS		REVISIONS				APPROVALS			
DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN	CK	APPR	DRAWN BY	DATE
		0	ISSUED FOR NJDEP PERMIT	7/2019	RJP	KEK	MJD	RJP	7/2019
								KEK	7/2019
								ENG. APPROVAL	DATE
								MJD	7/2019
								P.M. APPROVAL	DATE
								MW	7/2019

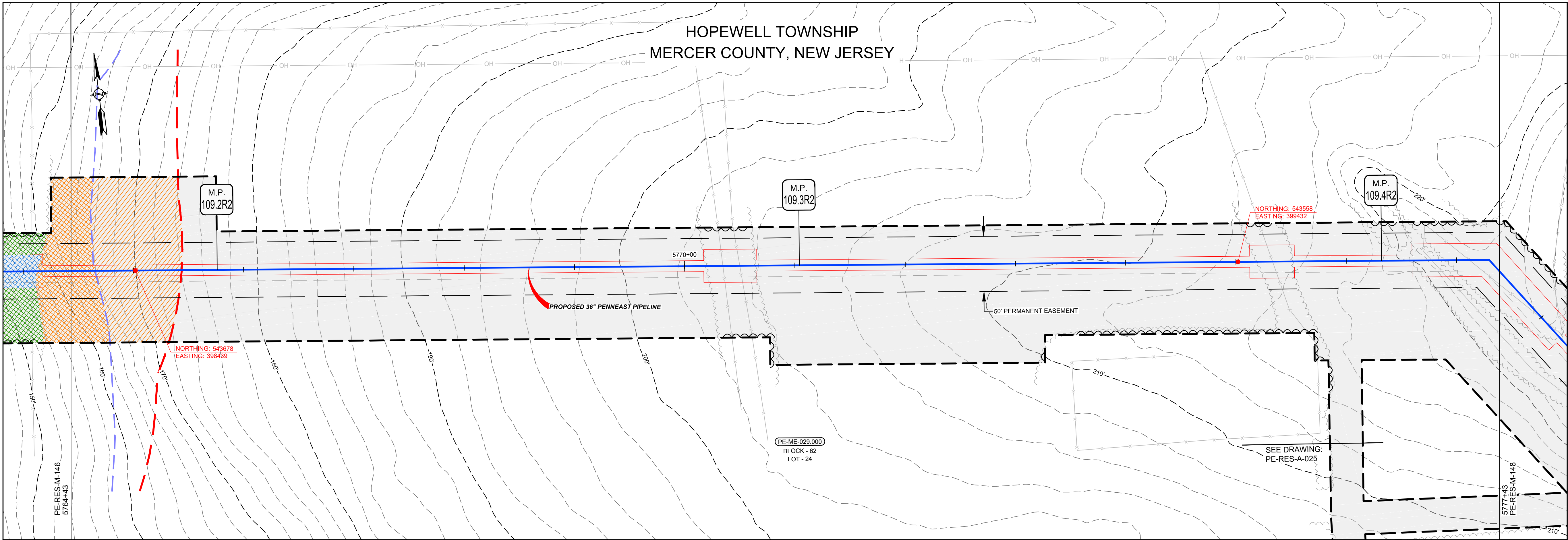
PREPARED FOR

PennEast
PIPELINE

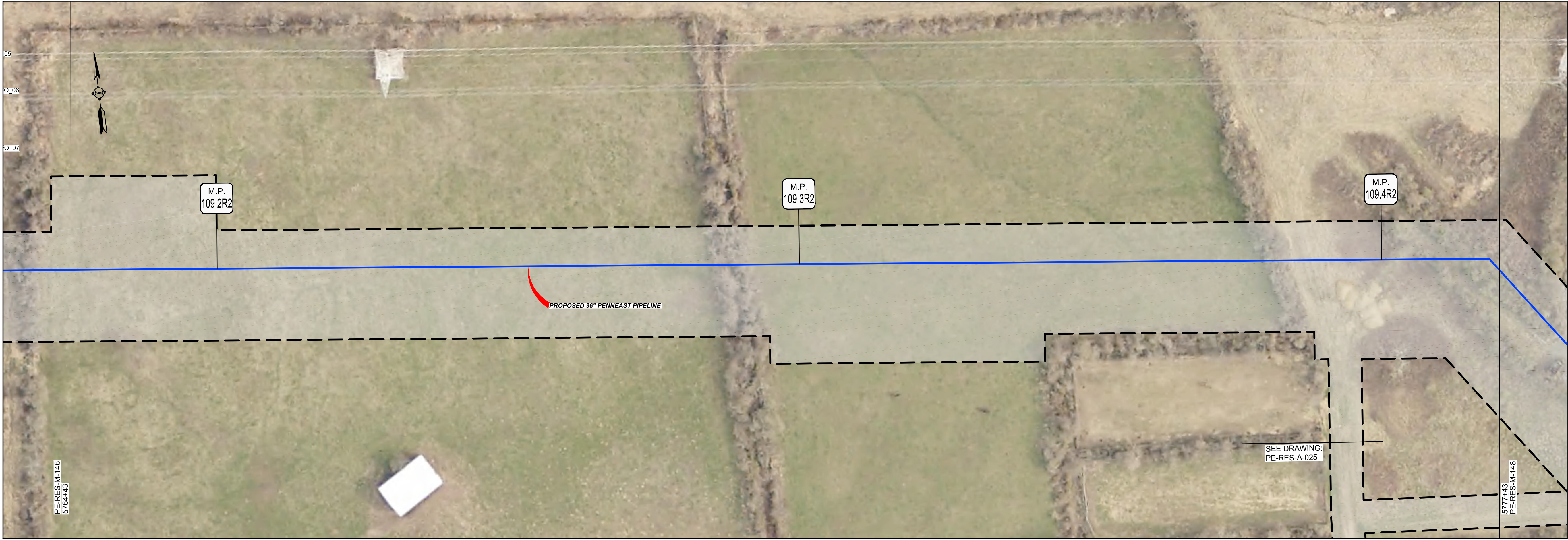
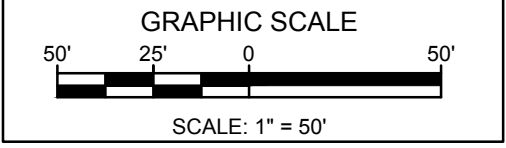
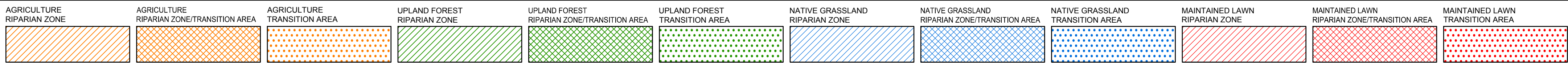
PREPARED BY

MOTT MACDONALD
111 WOOD AVENUE SOUTH, ISELIN, NJ, 08830
CERTIFICATE NO. 24GA28016800

PENNEAST PIPELINE PROJECT		
PENNEAST PIPELINE RESTORATION PERMIT PLAN MP 108.9R2 - MP 109.2R2		
SCALE	DRAWING NO.	REVISION
1" = 50'	PE-RES-M-146	0



RIPARIAN ZONE/TRANSITION AREA RESTORATION CATEGORIES



LEGEND

- PROPOSED PIPELINE
- LIMITS OF DISTURBANCE
- PROPOSED PERMANENT EASEMENT
- OPERATIONAL CORRIDOR
- PROPOSED TREE LINE (DURING CONSTRUCTION AND BEFORE RESTORATION)
- EXISTING TREE LINE
- WETLAND (SURVEYED)
- WETLAND (PUBLIC)
- PEM WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
- PSS WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
- PFO WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
- MODAG WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
- WATERBODY (SURVEYED)
- WATERBODY (PUBLIC)
- WATERBODY - TO BE RESTORED
- TRANSITION AREA
- RIPARIAN BUFFER (OUTER LIMITS ONLY)
- STREAM CENTERLINE (SURVEYED)
- STREAM CENTERLINE (PUBLIC)
- LIMITS OF WETLAND DELINEATION
- PROPERTY LINE
- PARCEL ID WITH BLOCK - 1 LOT - 10.00
- EXISTING CULVERT
- CORRUGATED PLASTIC PIPE
- CMP
- CORRUGATED METAL PIPE
- HDPE
- HIGH DENSITY POLYETHYLENE PIPE
- PVC
- POLYVINYL CHLORIDE PIPE
- RCP
- REINFORCED CONCRETE PIPE
- UNK
- UNKNOWN
- EXISTING FOREIGN UTILITY EASEMENT
- 1260'
- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- EXISTING PIPELINE
- OH
- EXISTING OVERHEAD LINE
- EXISTING TREE
- EXISTING FENCE
- WETLAND FLAG NO.
- WETLAND FLAG
- SAMPLE STATION
- SAMPLE STATION
- SOW_FLAG_NO.
- STATE OPEN WATER FLAG
- PHOTO LOCATION (SEE REPORT)

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N.J. LIC. NO. 24GS03676100

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PROFESSIONAL ENGINEER
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SIGNATURE: *Michael J. Denichilo* DATE: 08/01/2019

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DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN	CK	APPR	DRAWN BY	DATE
000-03-03-080	* ACCESS ROAD DETAIL	0	ISSUED FOR NJDEP PERMIT	7/2019	RJP	KEK	MJD	RJP	7/2019
								KEK	7/2019
								MJD	7/2019
								MW	7/2019

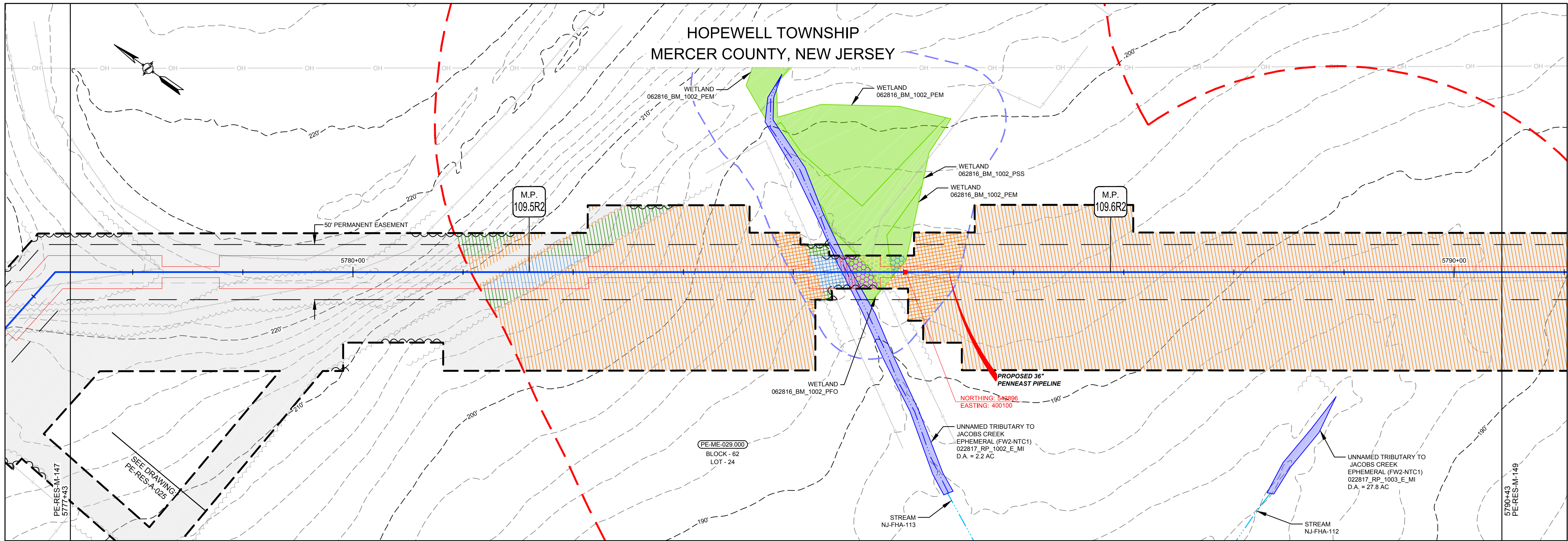
CLIENT APPROVAL	DATE

PREPARED FOR	PREPARED BY

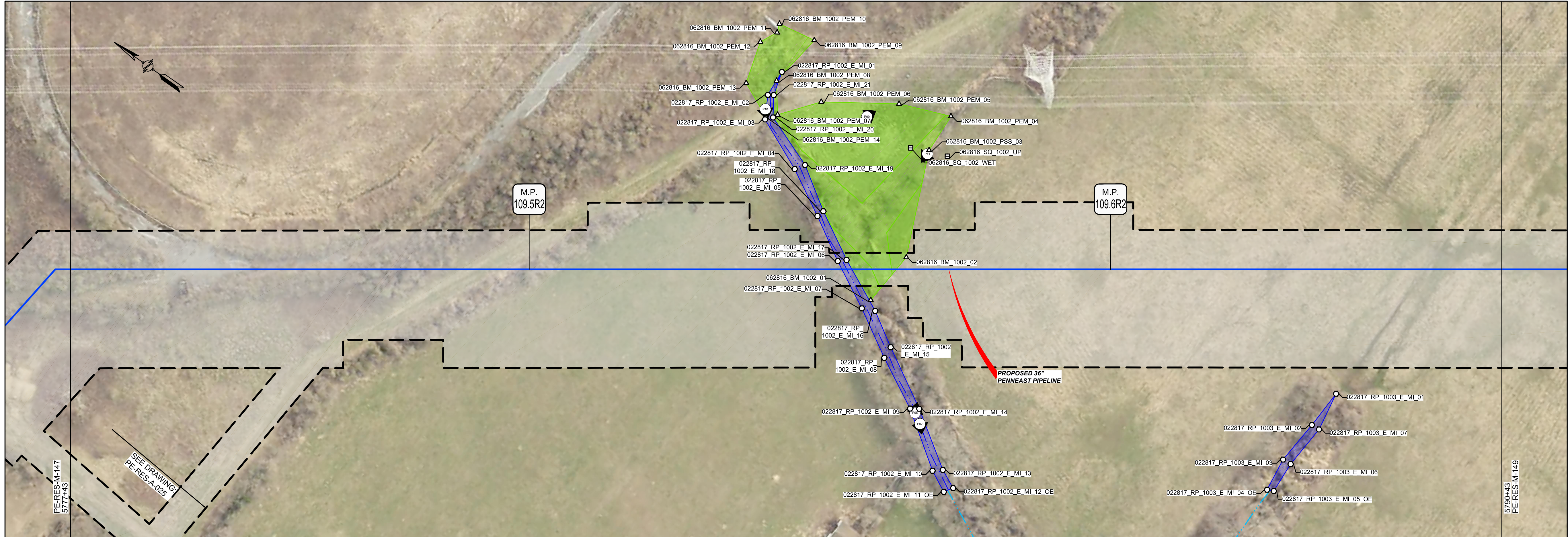
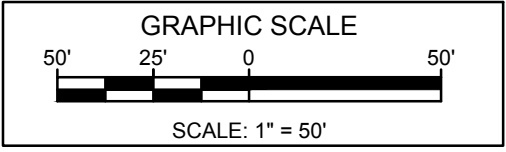
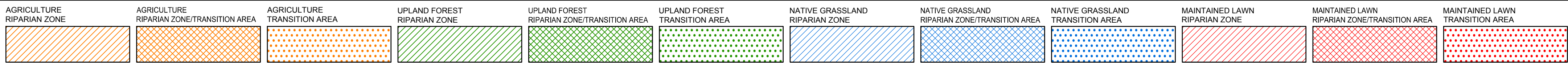
PennEast
PIPELINE

MOTT MACDONALD
111 WOOD AVENUE SOUTH, ISELIN, NJ, 08830
CERTIFICATE NO. 24GA28016800

PENNEAST PIPELINE PROJECT		
PENNEAST PIPELINE RESTORATION PERMIT PLAN		
MP 109.2R2 - MP 109.4R2		
SCALE	DRAWING NO.	REVISION
1" = 50'	PE-RES-M-147	0



RIPIARIAN ZONE/TRANSITION AREA RESTORATION CATEGORIES



LEGEND

- PROPOSED PIPELINE
- LIMITS OF DISTURBANCE
- PROPOSED PERMANENT EASEMENT
- OPERATIONAL CORRIDOR
- PROPOSED TREE LINE (DURING CONSTRUCTION AND BEFORE RESTORATION)
- EXISTING TREE LINE
- WETLAND (SURVEYED)
- WETLAND (PUBLIC)
- PEM WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
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- WATERBODY (SURVEYED)
- WATERBODY (PUBLIC)
- WATERBODY - TO BE RESTORED
- TRANSITION AREA
- RIPIARIAN BUFFER (OUTER LIMITS ONLY)
- STREAM CENTERLINE (SURVEYED)
- STREAM CENTERLINE (PUBLIC)
- LIMITS OF WETLAND DELINEATION
- PROPERTY LINE
- PARCEL ID WITH BLOCK AND LOT NUMBER (LB-HU-A001.000 BLOCK - 1 LOT - 10.00)
- EXISTING CULVERT
- CORRUGATED PLASTIC PIPE (CPP)
- CORRUGATED METAL PIPE (CMP)
- HIGH DENSITY POLYETHYLENE PIPE (HDPE)
- POLYVINYL CHLORIDE PIPE (PVC)
- REINFORCED CONCRETE PIPE (RCP)
- UNKNOWN (UNK)
- EXISTING FOREIGN UTILITY EASEMENT
- EXISTING MAJOR CONTOURS (1280')
- EXISTING MINOR CONTOURS
- EXISTING PIPELINE
- EXISTING OVERHEAD LINE (OH)
- EXISTING TREE
- EXISTING FENCE
- WETLAND FLAG NO. (WETLAND FLAG)
- SAMPLE STATION (SAMPLE STATION)
- SOW_FLAG_NO. (STATE OPEN WATER FLAG)
- PHOTO LOCATION (SEE REPORT)

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THOMAS D. STRONG
PROFESSIONAL LAND SURVEYOR
N.J. LIC. NO. 24G503676100

SIGNATURE: *Thomas D. Strong* DATE: 08/01/2019

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MICHAEL J. DENICHILO
PROFESSIONAL ENGINEER
N.J. LIC. NO. 24GE05078700

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REFERENCE DRAWINGS		NO.		REVISIONS		DATE		DRAWN		CK		APPR	
DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN	CK	APPR	DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN
000-03-03-080	* ACCESS ROAD DETAIL	0	ISSUED FOR NJDEP PERMIT	7/2019	RJP	KEK	MJD						

APPROVALS		DATE		DATE	
DRAWN BY	RJP	7/2019	DATE	DATE	DATE
CHECKED BY	KEK	7/2019	DATE	DATE	DATE
ENG. APPROVAL	MJD	7/2019	DATE	DATE	DATE
P.M. APPROVAL	MW	7/2019	DATE	DATE	DATE

APPROVALS		DATE	
DRAWN BY	RJP	7/2019	DATE
CHECKED BY	KEK	7/2019	DATE
ENG. APPROVAL	MJD	7/2019	DATE
P.M. APPROVAL	MW	7/2019	DATE

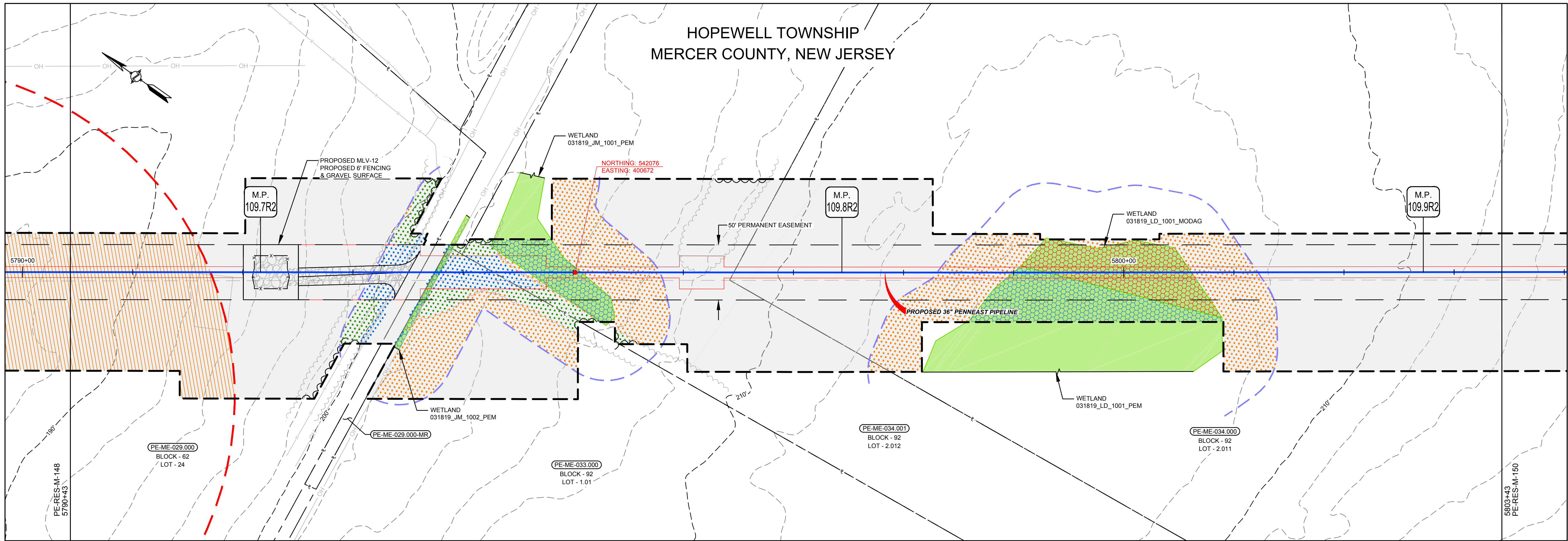
PREPARED FOR

PennEast
PIPELINE

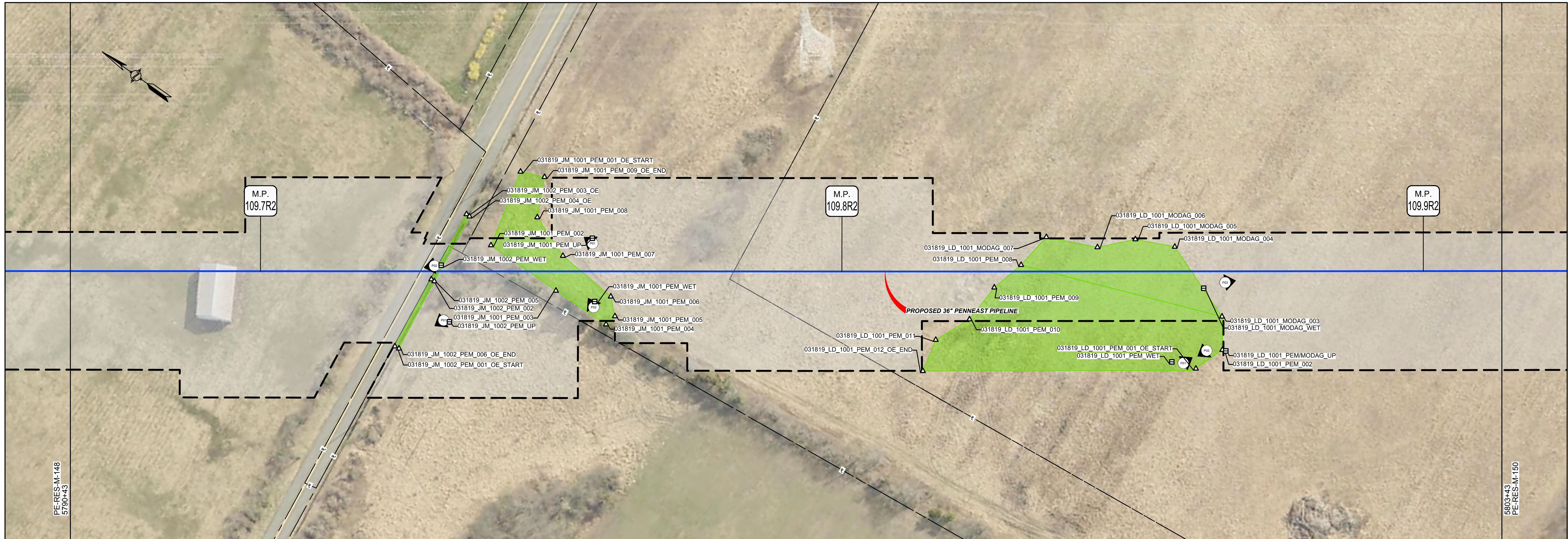
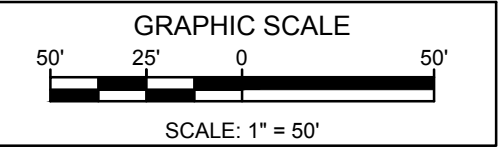
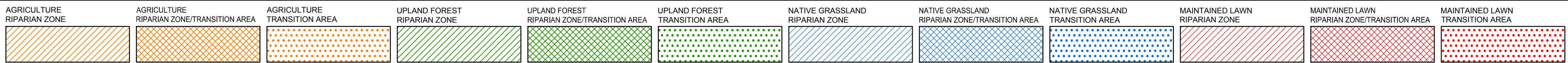
PREPARED BY

MOTT MACDONALD
111 WOOD AVENUE SOUTH, ISELIN, NJ, 08830
CERTIFICATE NO. 24GA28016800

PENNEAST PIPELINE PROJECT		
PENNEAST PIPELINE RESTORATION PERMIT PLAN MP 109.4R2 - MP 109.7R2		
SCALE	DRAWING NO.	REVISION
1" = 50'	PE-RES-M-148	0



RIPIARIAN ZONE/TRANSITION
AREA RESTORATION
CATEGORIES



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DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN	CK	APPR	
		0	ISSUED FOR NJDEP PERMIT	7/2019	RJP	KEK	MJD	

APPROVALS	
DRAWN BY	DATE
RJP	7/2019
CHECKED BY	DATE
KEK	7/2019
ENG. APPROVAL	DATE
MJD	7/2019
P.M. APPROVAL	DATE
MW	7/2019

CLIENT APPROVAL	DATE

PREPARED FOR
PennEast
PIPELINE

PREPARED BY
M M
MOTT
MACDONALD
111 WOOD AVENUE SOUTH, ISELIN, NJ, 08830
CERTIFICATE NO. 24GA28016800

LEGEND

- PROPOSED PIPELINE
- LIMITS OF DISTURBANCE
- PROPOSED PERMANENT EASEMENT
- OPERATIONAL CORRIDOR
- PROPOSED TREE LINE (DURING CONSTRUCTION AND BEFORE RESTORATION)
- EXISTING TREE LINE
- WETLAND (SURVEYED)
- WETLAND (PUBLIC)
- PEM WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
- PSS WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
- PFO WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
- MODAG WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
- WATERBODY (SURVEYED)
- WATERBODY (PUBLIC)
- WATERBODY - TO BE RESTORED
- TRANSITION AREA
- RIPIARIAN BUFFER (OUTER LIMITS ONLY)
- STREAM CENTERLINE (SURVEYED)
- STREAM CENTERLINE (PUBLIC)
- LIMITS OF WETLAND DELINEATION
- PROPERTY LINE
- PARCEL ID WITH BLOCK AND LOT NUMBER
- EXISTING CULVERT
- CORRUGATED PLASTIC PIPE
- CORRUGATED METAL PIPE
- HDPE
- PVC
- RCP
- UNK
- EXISTING FOREIGN UTILITY EASEMENT
- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- EXISTING PIPELINE
- EXISTING OVERHEAD LINE
- EXISTING TREE
- EXISTING FENCE
- WETLAND FLAG NO.
- SAMPLE STATION
- SOW_FLAG_NO.
- STATE OPEN WATER FLAG
- PHOTO LOCATION (SEE REPORT)

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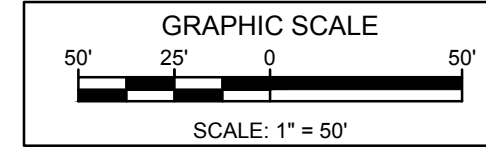
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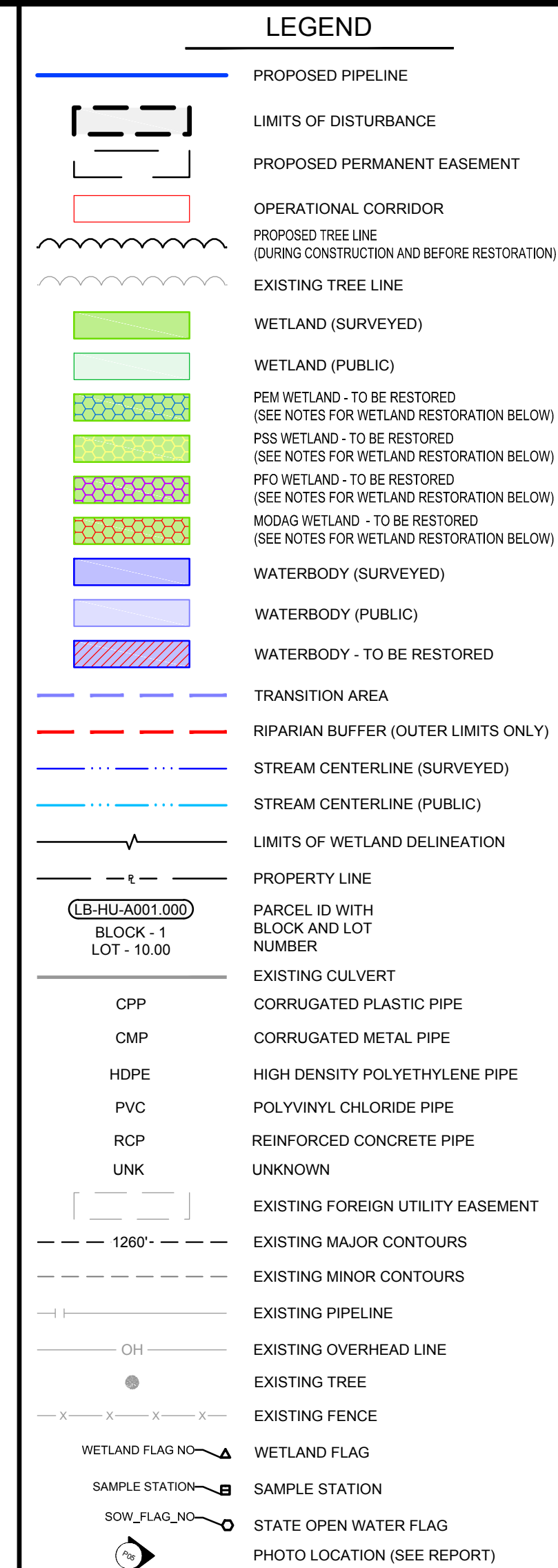
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SCALE	DRAWING NO.	REVISION
1" = 50'	PE-RES-M-148	0



PENNEAST PIPELINE PROJECT		
<p align="center">PENNEAST PIPELINE RESTORATION PERMIT PLAN</p> <p align="center">MP 109.9R2 - MP 110.2R2</p>		
SCALE	DRAWING NO.	REVISION
1" = 50'	PE-RES-M-150	0



NOTES FOR WETLAND RESTORATION:

PEN WETLANDS IMPACTED WILL BE RESTORED AS PEN WETLANDS*

PSS WETLANDS WITHIN THE LIMITS OF DISTURBANCE AND OUTSIDE THE OPERATIONAL CORRIDOR WILL BE RESTORED AS PSS WETLANDS. PSS WETLANDS WITHIN THE OPERATIONAL CORRIDOR WILL BE RESTORED AS PEN WETLANDS.

PFO WETLANDS WITHIN THE LIMITS OF DISTURBANCE AND OUTSIDE THE OPERATIONAL CORRIDOR WILL BE RESTORED AS PFO WETLANDS. PFO WETLANDS WITHIN THE OPERATIONAL CORRIDOR WILL BE RESTORED AS PEN WETLANDS.

MODAG WETLANDS IMPACTED WILL BE RESTORED AS MODAG WETLANDS.

I AM A DULY REGISTERED PROFESSIONAL LAND SURVEYOR
UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I
HEREBY CERTIFY THAT EXISTING CONDITIONS SHOWN
WERE FIELD LOCATED AND PREPARED UNDER MY DIRECT
SUPERVISION.

THOMAS D. STRONG

PROFESSIONAL LAND SURVEYOR

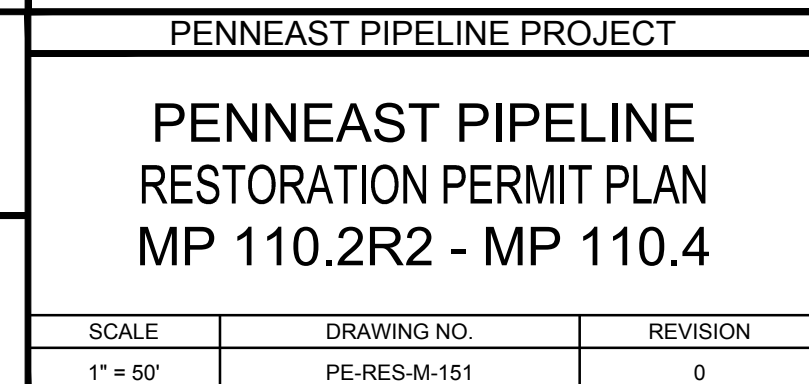
N.J. LIC. NO. 24GS03676100

SIGNATURE _____ DATE 08/01/2019

I AM A DULY REGISTERED PROFESSIONAL ENGINEER
UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I
HEREBY CERTIFY THAT THE PROPOSED ENVIRONMENTAL
DISTURBANCES SHOWN ARE ACCURATE AND CORRESPOND
WITH THE DETAILED ENGINEERING DRAWINGS.

MICHAEL J. DENICHILO
PROFESSIONAL ENGINEER
N.J. LIC. NO. 24GE05078700

Michael J. Hulse 08/01/2019
SIGNATURE DATE



NOTES:

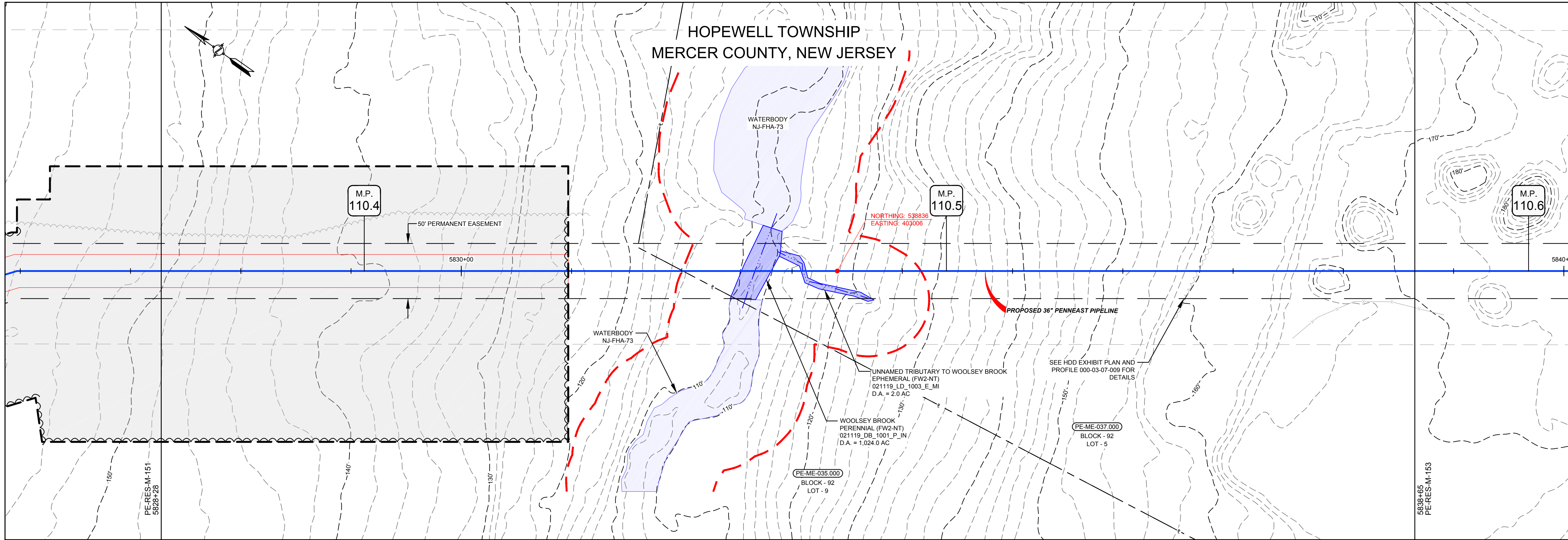
1. UNLESS THESE DRAWINGS ARE SPECIFICALLY DESIGNATED AS "CONSTRUCTION ISSUE", THESE DRAWINGS SHALL NOT BE USED FOR CONSTRUCTION OR IMPROVEMENTS DEPICTED HEREIN. CONTRACTORS SHALL NOTIFY THE DESIGN ENGINEER TO OBTAIN CONSTRUCTION DOCUMENTS.
2. THESE PLANS ARE FOR PERMITTING PURPOSES ONLY. THESE PLANS SHALL NOT BE USED FOR CONSTRUCTION.
3. WETLAND AND WATERBODY DELINEATION SURVEYS COMPLETED BY AMY S. GREENE ENVIRONMENTAL CONSULTANTS.
4. PHOTO LOCATIONS PROVIDED BY AMY S. GREENE ENVIRONMENTAL CONSULTANTS.
5. UPLAND ZONES AND WETLAND TRANSITION AREAS PROVIDED BY PALLUS, SOKOLOWSKI AND SARTOR (PS&S).
6. CIVIL SURVEY CONDUCTED AND DRAWINGS PREPARED BY MOTT MACDONALD.
7. RESTORATION METHODS AND HATCHING SHOWN ON PLANS PROVIDED BY AMY S. GREENE ENVIRONMENTAL CONSULTANTS.

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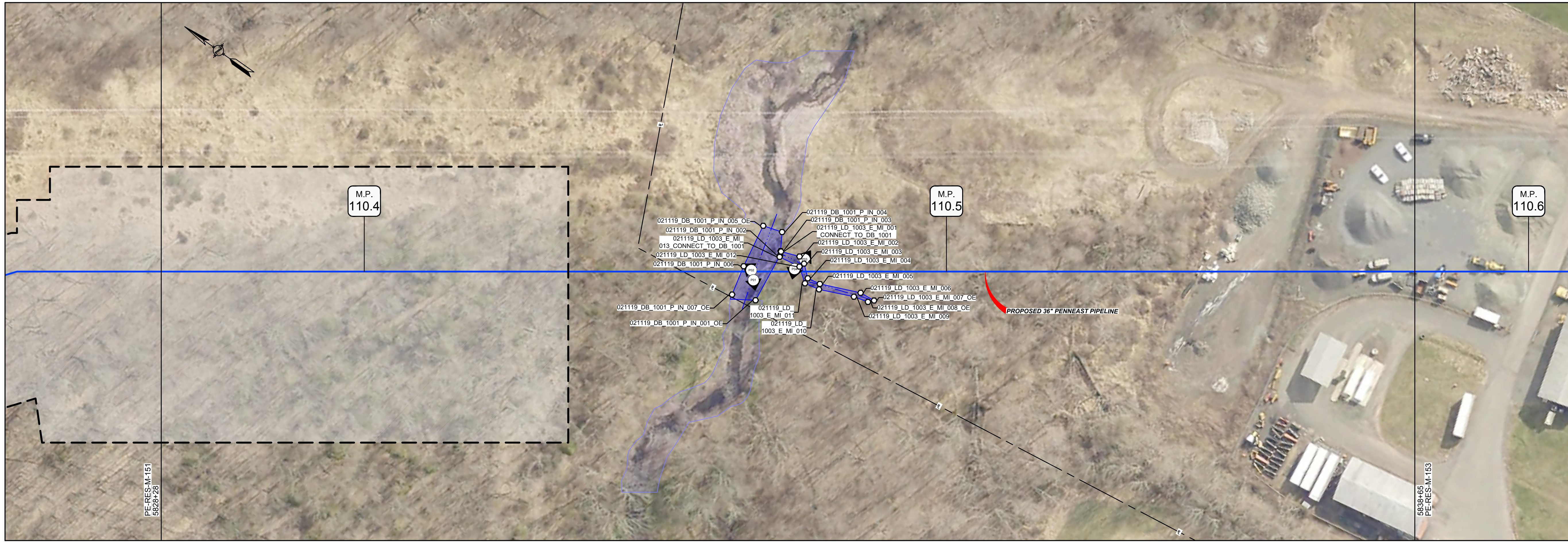
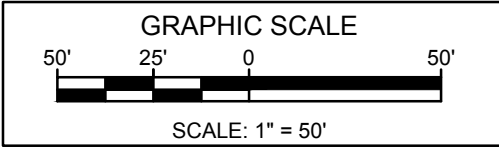
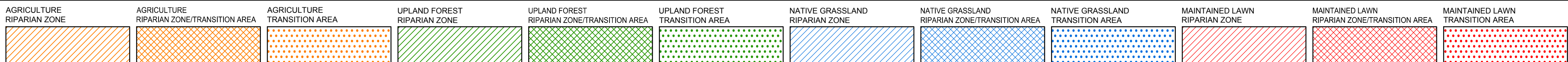
APPROVALS	
DRAWN BY	DATE
RJP	7/2019
CHECKED BY	DATE
KEK	7/2019
ENG. APPROVAL	DATE
MJD	7/2019
P.M. APPROVAL	DATE
MW	7/2019

CLIENT APPROVAL
DATE
7/2019

	PREPARED FOR	 PennEast PIPELINE
	PREPARED BY	M M MOTT MACDONALD 111 WOOD AVENUE SOUTH, ISELIN, NJ, 08830 CERTIFICATE NO. 24GA28016600



RIPIARIAN ZONE/TRANSITION
AREA RESTORATION
CATEGORIES



- NOTES:
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REFERENCE DRAWINGS		REVISIONS		APPROVALS			
DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN	CK	APPR
000-03-07-009	* HDD EXHIBIT PLAN AND PROFILE	0	ISSUED FOR NJDEP PERMIT	7/2019	RJP	KEK	MJD

APPROVALS		CLIENT APPROVAL	DATE
DRAWN BY	DATE		
RJP	7/2019		
CHECKED BY	DATE		
KEK	7/2019		
ENG. APPROVAL	DATE		
MJD	7/2019		
P.M. APPROVAL	DATE		
MW	7/2019		

PREPARED FOR	PREPARED BY
	111 WOOD AVENUE SOUTH, ISELIN, NJ, 08830
	CERTIFICATE NO. 24GA28016800

LEGEND

- PROPOSED PIPELINE
- LIMITS OF DISTURBANCE
- PROPOSED PERMANENT EASEMENT
- OPERATIONAL CORRIDOR
- PROPOSED TREE LINE (DURING CONSTRUCTION AND BEFORE RESTORATION)
- EXISTING TREE LINE
- WETLAND (SURVEYED)
- WETLAND (PUBLIC)
- PEM WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
- PSS WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
- PFO WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
- MODAG WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
- WATERBODY (SURVEYED)
- WATERBODY (PUBLIC)
- WATERBODY - TO BE RESTORED
- TRANSITION AREA
- RIPIARIAN BUFFER (OUTER LIMITS ONLY)
- STREAM CENTERLINE (SURVEYED)
- STREAM CENTERLINE (PUBLIC)
- LIMITS OF WETLAND DELINEATION
- PROPERTY LINE
- PARCEL ID WITH BLOCK AND LOT NUMBER
- EXISTING CULVERT
- CORRUGATED PLASTIC PIPE
- CORRUGATED METAL PIPE
- HDPE
- PVC
- RCP
- UNK
- EXISTING FOREIGN UTILITY EASEMENT
- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- EXISTING PIPELINE
- EXISTING OVERHEAD LINE
- EXISTING TREE
- EXISTING FENCE
- WETLAND FLAG NO.
- SAMPLE STATION
- STATE OPEN WATER FLAG
- PHOTO LOCATION (SEE REPORT)

NOTES FOR WETLAND RESTORATION:

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THOMAS D. STRONG
PROFESSIONAL LAND SURVEYOR
N.J. LIC. NO. 24GS03676100

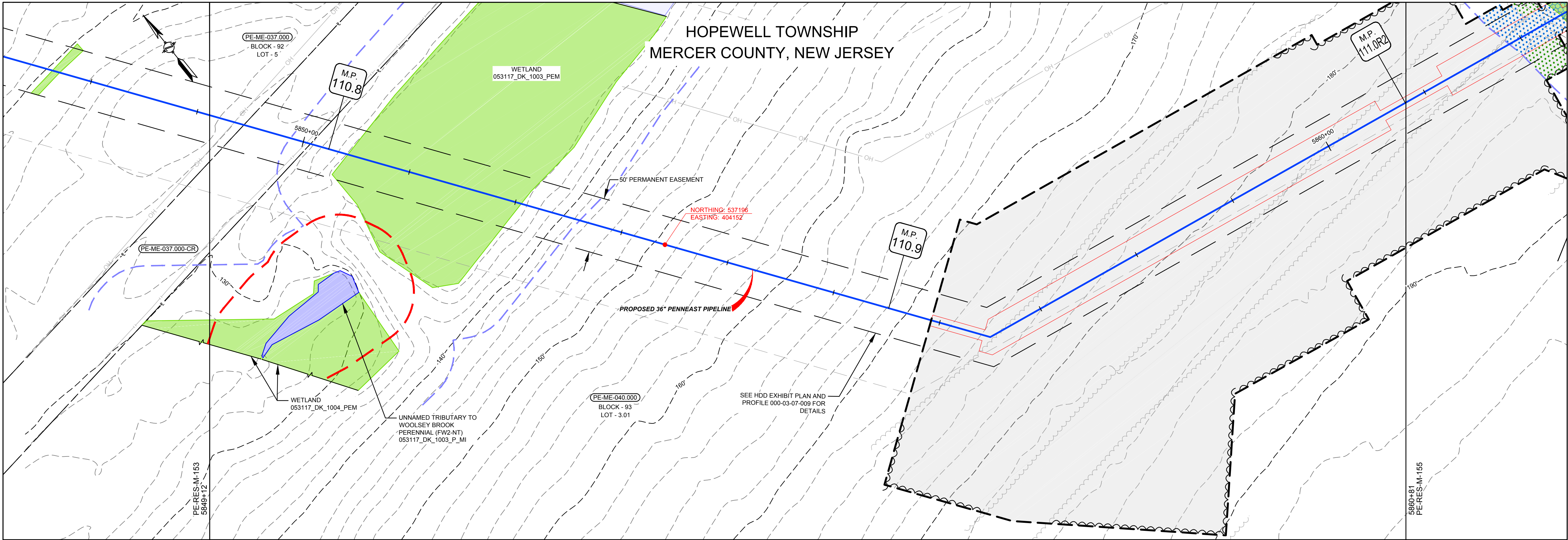
08/01/2019
SIGNATURE DATE

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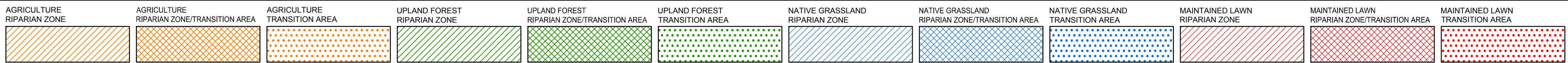
MICHAEL J. DENICHILO
PROFESSIONAL ENGINEER
N.J. LIC. NO. 24GE05078700

08/01/2019
SIGNATURE DATE

PENNEAST PIPELINE PROJECT		
PENNEAST PIPELINE RESTORATION PERMIT PLAN MP 110.4 - MP 110.6		
SCALE	DRAWING NO.	REVISION
1" = 50'	PE-RES-M-152	0



RIPARIAN ZONE/TRANSITION AREA RESTORATION CATEGORIES



LEGEND

PROPOSED PIPELINE
LIMITS OF DISTURBANCE
PROPOSED PERMANENT EASEMENT
OPERATIONAL CORRIDOR
PROPOSED TREE LINE (DURING CONSTRUCTION AND BEFORE RESTORATION)
EXISTING TREE LINE
WETLAND (SURVEYED)
WETLAND (PUBLIC)
PEM WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
PSS WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
PFO WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
MODAG WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
WATERBODY (SURVEYED)
WATERBODY (PUBLIC)
WATERBODY - TO BE RESTORED
TRANSITION AREA
RIPARIAN BUFFER (OUTER LIMITS ONLY)
STREAM CENTERLINE (SURVEYED)
STREAM CENTERLINE (PUBLIC)
LIMITS OF WETLAND DELINEATION
PROPERTY LINE
PARCEL ID WITH BLOCK - 1 LOT - 10.00
EXISTING CULVERT
CORRUGATED PLASTIC PIPE
CORRUGATED METAL PIPE
HDPE
PVC
RCP
UNK
EXISTING FOREIGN UTILITY EASEMENT
EXISTING MAJOR CONTOURS
EXISTING MINOR CONTOURS
EXISTING PIPELINE
EXISTING OVERHEAD LINE
EXISTING TREE
EXISTING FENCE
WETLAND FLAG NO.
SAMPLE STATION
SOW_FLAG_NO
STATE OPEN WATER FLAG
PHOTO LOCATION (SEE REPORT)

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THOMAS D. STRONG
PROFESSIONAL LAND SURVEYOR
N.J. LIC. NO. 24G503676100

SIGNATURE: *Thomas D. Strong* DATE: 08/01/2019

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MICHAEL J. DENICHILO
PROFESSIONAL ENGINEER
N.J. LIC. NO. 24GE05078700

SIGNATURE: *Michael J. Denichilo* DATE: 08/01/2019

- NOTES:**
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REFERENCE DRAWINGS	
DWG. NO.	TITLE
000-03-07-009	* HDD EXHIBIT PLAN AND PROFILE

REVISIONS	
NO.	REVISIONS
0	ISSUED FOR NJDEP PERMIT

APPROVALS	
DRAWN BY	DATE
RJP	7/2019
CHECKED BY	DATE
KEK	7/2019
ENG. APPROVAL	DATE
MJD	7/2019
P.M. APPROVAL	DATE
MW	7/2019

CLIENT APPROVAL	
DATE	
7/2019	

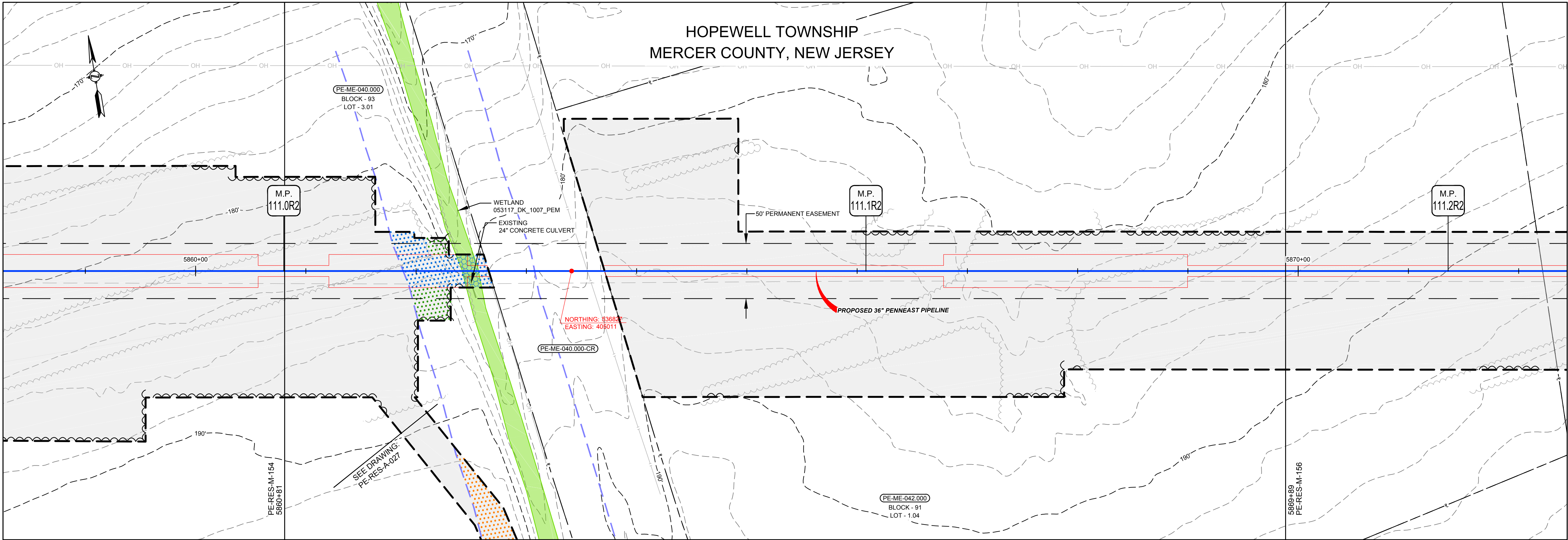
PREPARED FOR

PennEast
PIPELINE

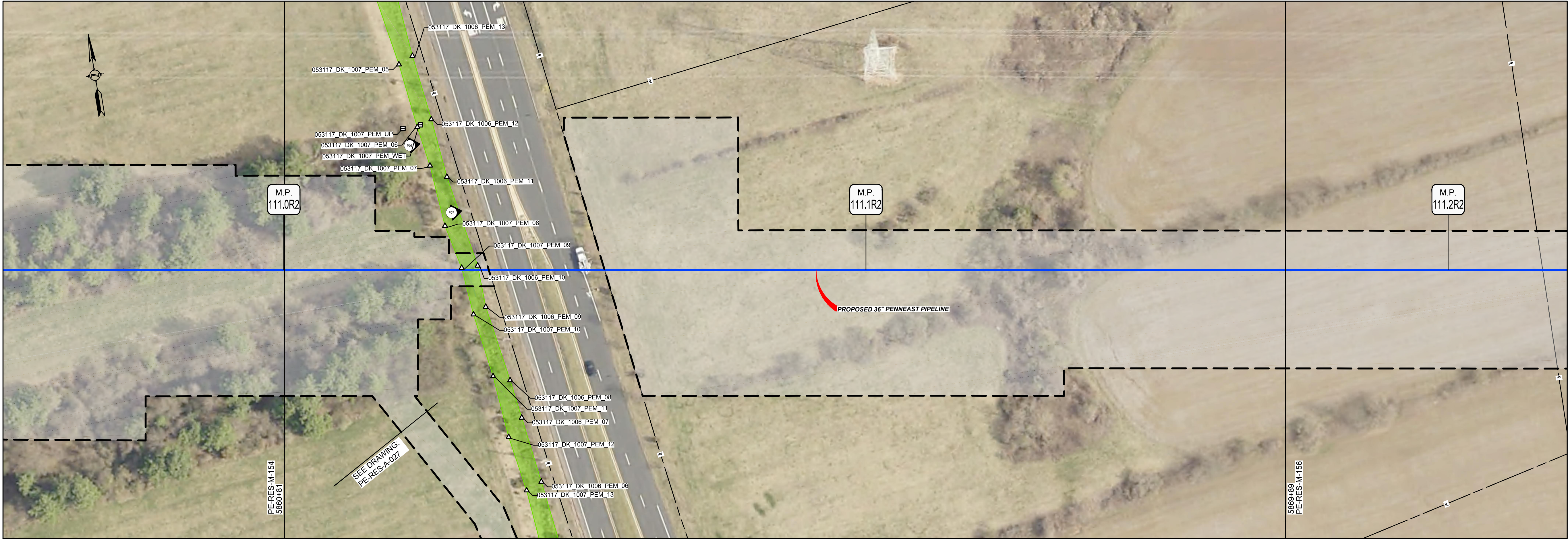
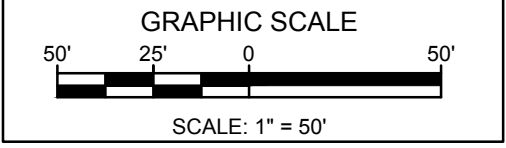
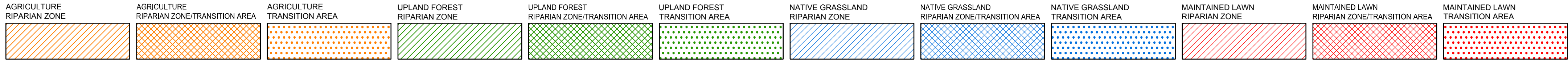
PREPARED BY

MOTT MACDONALD
111 WOOD AVENUE SOUTH, ISELIN, NJ, 08830
CERTIFICATE NO. 24GA28016800

PENNEAST PIPELINE PROJECT		
PENNEAST PIPELINE RESTORATION PERMIT PLAN MP 110.8 - MP 111.0R2		
SCALE	DRAWING NO.	REVISION
1" = 50'	PE-RES-M-154	0



RIPARIAN ZONE/TRANSITION AREA RESTORATION CATEGORIES



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 - RESTORATION METHODS AND HATCHING SHOWN ON PLANS PROVIDED BY AMY S. GREENE ENVIRONMENTAL CONSULTANTS.

REFERENCE DRAWINGS	
DWG. NO.	TITLE
000-03-03-083	* ACCESS ROAD DETAIL

REVISIONS	
NO.	REVISIONS
0	ISSUED FOR NJDEP PERMIT

DATE	DRAWN	CK	APPR
7/2019	RJP	KEK	MJD

APPROVALS	
DRAWN BY	DATE
RJP	7/2019
CHECKED BY	DATE
KEK	7/2019
ENG. APPROVAL	DATE
MJD	7/2019
P.M. APPROVAL	DATE
MW	7/2019

CLIENT APPROVAL	
DATE	
7/2019	

PREPARED FOR

PennEast
PIPELINE

PREPARED BY

MOTT MACDONALD
111 WOOD AVENUE SOUTH, ISELIN, NJ, 08830
CERTIFICATE NO. 24GA28016800

LEGEND

- PROPOSED PIPELINE
- LIMITS OF DISTURBANCE
- PROPOSED PERMANENT EASEMENT
- OPERATIONAL CORRIDOR
- PROPOSED TREE LINE (DURING CONSTRUCTION AND BEFORE RESTORATION)
- EXISTING TREE LINE
- WETLAND (SURVEYED)
- WETLAND (PUBLIC)
- PEM WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
- PSS WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
- PFO WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
- MODAG WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
- WATERBODY (SURVEYED)
- WATERBODY (PUBLIC)
- WATERBODY - TO BE RESTORED
- TRANSITION AREA
- RIPARIAN BUFFER (OUTER LIMITS ONLY)
- STREAM CENTERLINE (SURVEYED)
- STREAM CENTERLINE (PUBLIC)
- LIMITS OF WETLAND DELINEATION
- PROPERTY LINE
- PARCEL ID WITH BLOCK AND LOT NUMBER
- EXISTING CULVERT
- CORRUGATED PLASTIC PIPE
- CMP
- CORRUGATED METAL PIPE
- HDPE
- HIGH DENSITY POLYETHYLENE PIPE
- PVC
- POLYVINYL CHLORIDE PIPE
- RCP
- REINFORCED CONCRETE PIPE
- UNK
- UNKNOWN
- EXISTING FOREIGN UTILITY EASEMENT
- 1260'
- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- EXISTING PIPELINE
- OH
- EXISTING OVERHEAD LINE
- EXISTING TREE
- EXISTING FENCE
- WETLAND FLAG NO.
- WETLAND FLAG
- SAMPLE STATION
- SAMPLE STATION
- SOW_FLAG_NO.
- STATE OPEN WATER FLAG
- PHOTO LOCATION (SEE REPORT)

NOTES FOR WETLAND RESTORATION:

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THOMAS D. STRONG
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N.J. LIC. NO. 24GS03676100

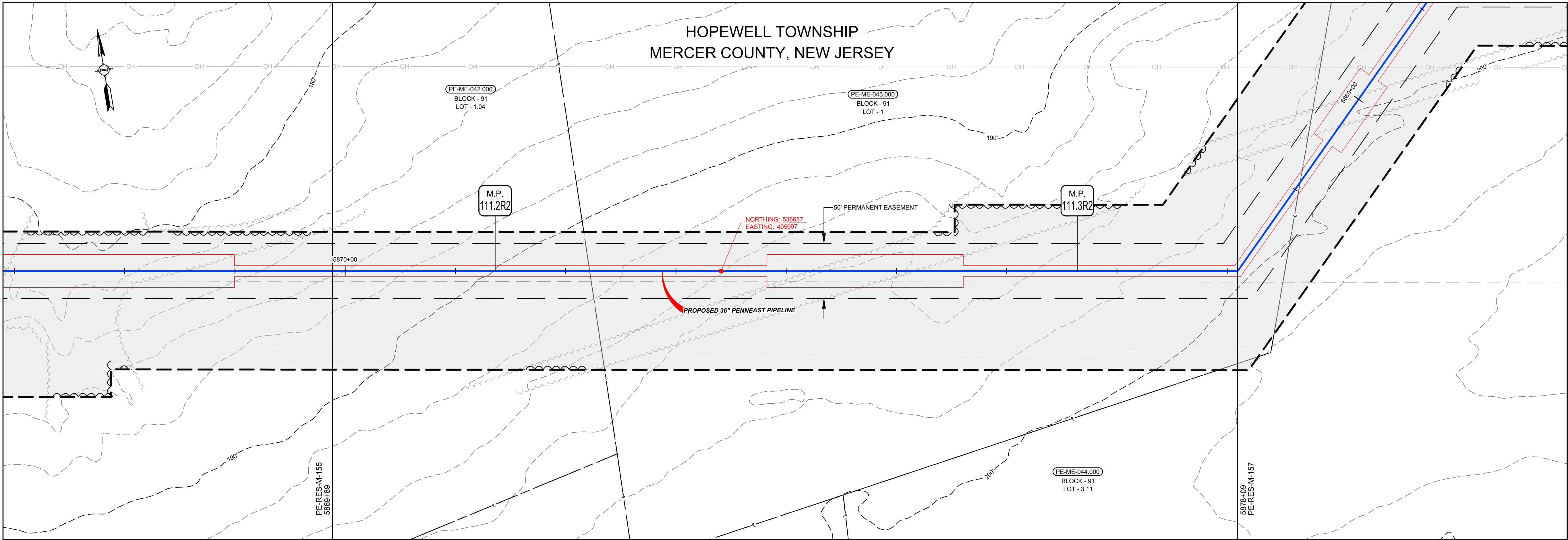
Thomas D. Strong 08/01/2019
SIGNATURE DATE

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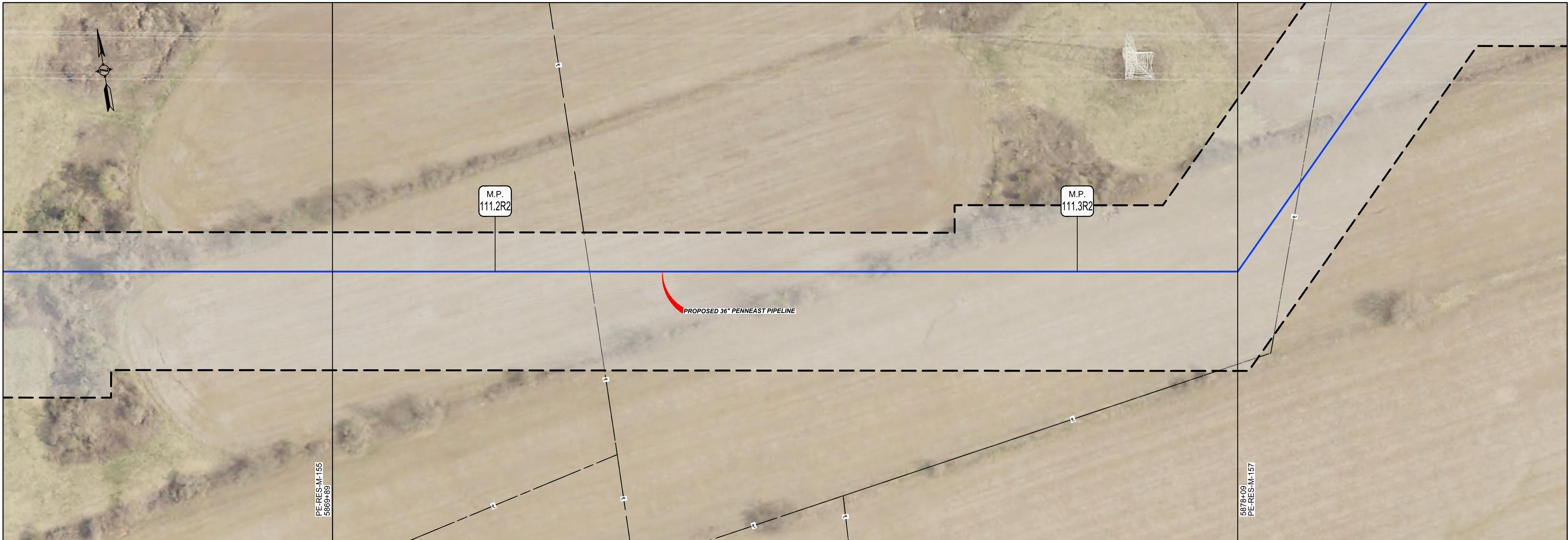
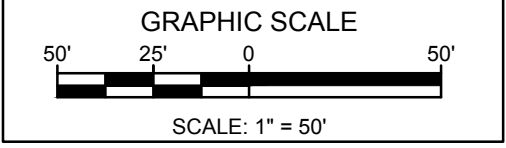
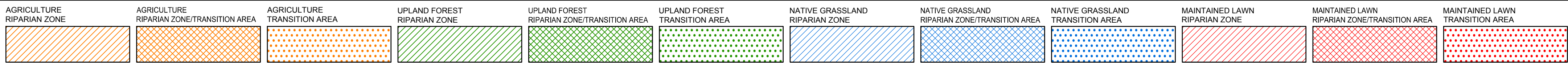
MICHAEL J. DENICHILO
PROFESSIONAL ENGINEER
N.J. LIC. NO. 24GE05078700

Michael J. Denichilo 08/01/2019
SIGNATURE DATE

PENNEAST PIPELINE PROJECT		
PENNEAST PIPELINE RESTORATION PERMIT PLAN MP 111.0R2 - MP 111.2R2		
SCALE	DRAWING NO.	REVISION
1" = 50'	PE-RES-M-155	0



RIPIARIAN ZONE/TRANSITION
AREA RESTORATION
CATEGORIES



LEGEND

- PROPOSED PIPELINE
- LIMITS OF DISTURBANCE
- PROPOSED PERMANENT EASEMENT
- OPERATIONAL CORRIDOR
- PROPOSED TREE LINE (DURING CONSTRUCTION AND BEFORE RESTORATION)
- EXISTING TREE LINE
- WETLAND (SURVEYED)
- WETLAND (PUBLIC)
- PEM WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
- PSS WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
- PFO WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
- MODAG WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
- WATERBODY (SURVEYED)
- WATERBODY (PUBLIC)
- WATERBODY - TO BE RESTORED
- TRANSITION AREA
- RIPIARIAN BUFFER (OUTER LIMITS ONLY)
- STREAM CENTERLINE (SURVEYED)
- STREAM CENTERLINE (PUBLIC)
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- UNKNOWN
- EXISTING FOREIGN UTILITY EASEMENT
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- EXISTING MAJOR CONTOURS
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- OH
- EXISTING OVERHEAD LINE
- EXISTING TREE
- EXISTING FENCE
- WETLAND FLAG NO.
- WETLAND FLAG
- SAMPLE STATION
- SAMPLE STATION
- SOW_FLAG_NO.
- STATE OPEN WATER FLAG
- PHOTO LOCATION (SEE REPORT)

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N.J. LIC. NO. 24GS03676100

Thomas D. Strong 08/01/2019
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 - PHOTO LOCATIONS PROVIDED BY AMY S. GREENE ENVIRONMENTAL CONSULTANTS.
 - RIPIARIAN ZONES AND WETLAND TRANSITION AREAS PROVIDED BY PAULUS, SOKOLOWSKI AND SARTOR (PS&S).
 - CIVIL SURVEY CONDUCTED AND DRAWINGS PREPARED BY MOTT MACDONALD.
 - RESTORATION METHODS AND HATCHING SHOWN ON PLANS PROVIDED BY AMY S. GREENE ENVIRONMENTAL CONSULTANTS.

REFERENCE DRAWINGS		REVISIONS						
DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN	CK	APPR	
		0	ISSUED FOR NJDEP PERMIT	7/2019	RJP	KEK	MJD	

APPROVALS	
DRAWN BY	DATE
RJP	7/2019
CHECKED BY	DATE
KEK	7/2019
ENG. APPROVAL	DATE
MJD	7/2019
P.M. APPROVAL	DATE
MW	7/2019

CLIENT APPROVAL	DATE

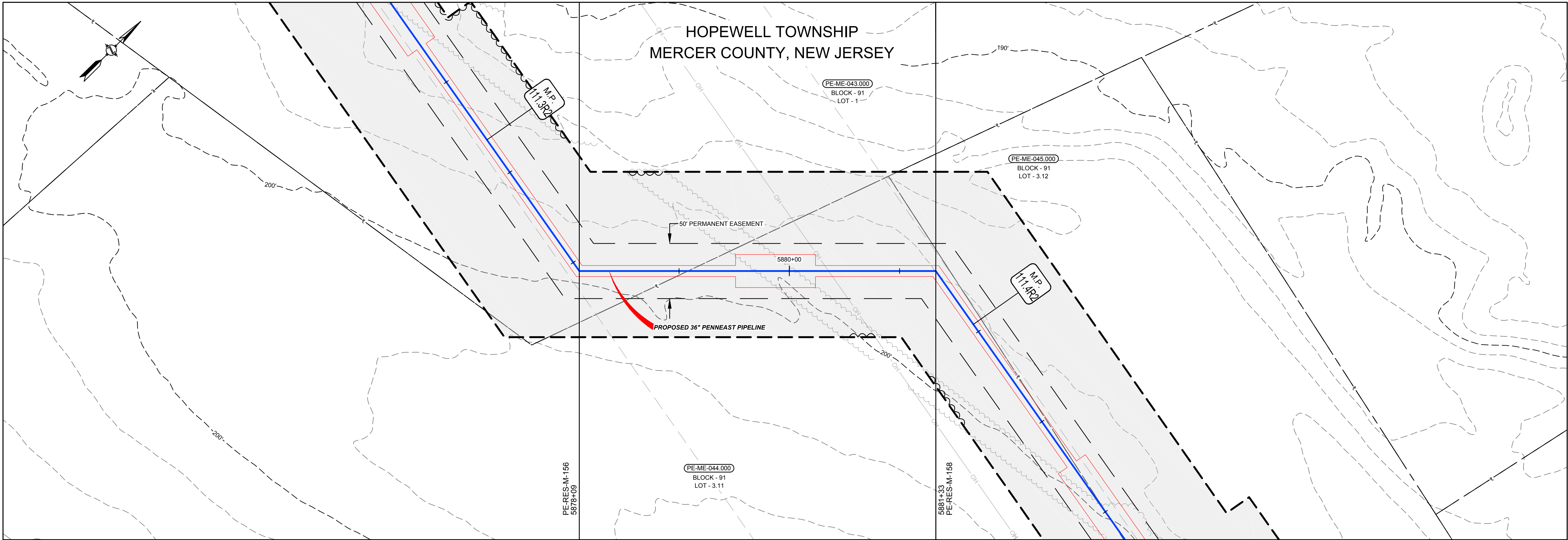
PREPARED FOR

PennEast
PIPELINE

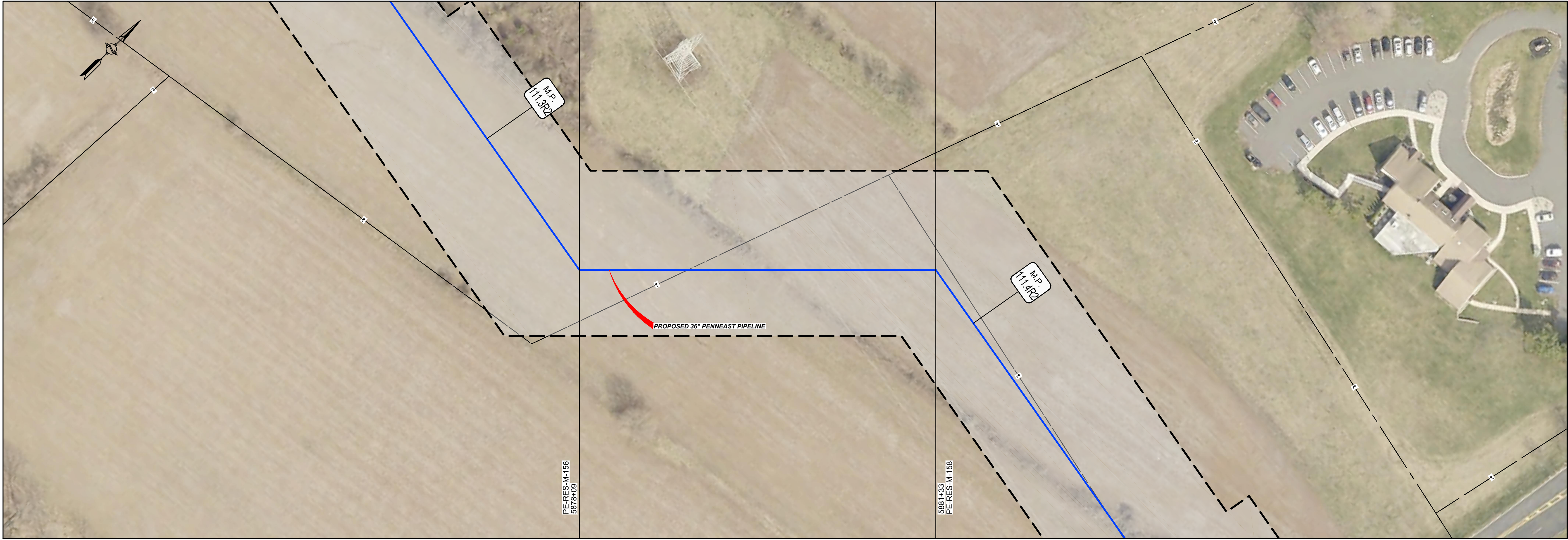
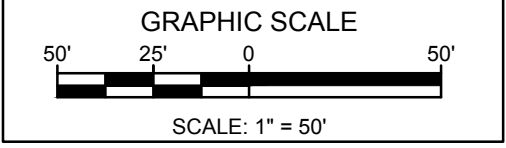
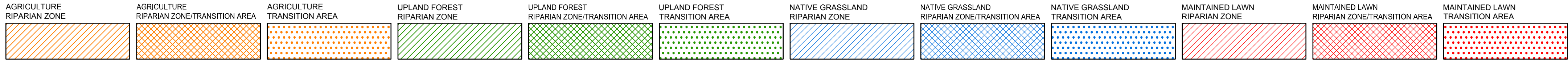
PREPARED BY

MOTT MACDONALD
MOTT MACDONALD
111 WOOD AVENUE SOUTH, ISELIN, NJ, 08830
CERTIFICATE NO. 24GA28016800

PENNEAST PIPELINE PROJECT		
PENNEAST PIPELINE RESTORATION PERMIT PLAN MP 111.2R2 - MP 111.3R2		
SCALE	DRAWING NO.	REVISION
1" = 50'	PE-RES-M-156	0



RIPIARIAN ZONE/TRANSITION
AREA RESTORATION
CATEGORIES



- NOTES:
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REFERENCE DRAWINGS		NO.		REVISIONS			
DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN	CK	APPR
		0	ISSUED FOR NJDEP PERMIT	7/2019	RJP	KEK	MJD

REVISIONS				APPROVALS			
NO.	REVISIONS	DATE	DRAWN	CK	APPR	DRAWN BY	DATE
						RJP	7/2019
						KEK	7/2019
						MJD	7/2019
						MW	7/2019

APPROVALS		CLIENT APPROVAL	
DRAWN BY	DATE	DRAWN BY	DATE
RJP	7/2019		
KEK	7/2019		
MJD	7/2019		
MW	7/2019		

CLIENT APPROVAL		DATE	

PREPARED FOR		PREPARED BY	

PENNEAST PIPELINE PROJECT		
PENNEAST PIPELINE RESTORATION PERMIT PLAN MP 111.3R2 - MP 111.4R2		
SCALE	DRAWING NO.	REVISION
1" = 50'	PE-RES-M-157	0

LEGEND

- PROPOSED PIPELINE
- LIMITS OF DISTURBANCE
- PROPOSED PERMANENT EASEMENT
- OPERATIONAL CORRIDOR
- PROPOSED TREE LINE (DURING CONSTRUCTION AND BEFORE RESTORATION)
- EXISTING TREE LINE
- WETLAND (SURVEYED)
- WETLAND (PUBLIC)
- PEM WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
- PSS WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
- PFO WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
- MODAG WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
- WATERBODY (SURVEYED)
- WATERBODY (PUBLIC)
- WATERBODY - TO BE RESTORED
- TRANSITION AREA
- RIPIARIAN BUFFER (OUTER LIMITS ONLY)
- STREAM CENTERLINE (SURVEYED)
- STREAM CENTERLINE (PUBLIC)
- LIMITS OF WETLAND DELINEATION
- PROPERTY LINE
- PARCEL ID WITH BLOCK AND LOT NUMBER
- EXISTING CULVERT
- CORRUGATED PLASTIC PIPE
- CORRUGATED METAL PIPE
- HDPPE
- PVC
- RCP
- UNK
- EXISTING FOREIGN UTILITY EASEMENT
- 1260'
- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- EXISTING PIPELINE
- EXISTING OVERHEAD LINE
- EXISTING TREE
- EXISTING FENCE
- WETLAND FLAG NO.
- WETLAND FLAG
- SAMPLE STATION
- SAMPLE STATION
- SOW FLAG NO.
- STATE OPEN WATER FLAG
- PHOTO LOCATION (SEE REPORT)

NOTES FOR WETLAND RESTORATION:

PEM WETLANDS IMPACTED WILL BE RESTORED AS PEM WETLANDS*

PSS WETLANDS WITHIN THE LIMITS OF DISTURBANCE AND OUTSIDE THE OPERATIONAL CORRIDOR WILL BE RESTORED AS PSS WETLANDS. PSS WETLANDS WITHIN THE OPERATIONAL CORRIDOR WILL BE RESTORED AS PEM WETLANDS.

PFO WETLANDS WITHIN THE LIMITS OF DISTURBANCE AND OUTSIDE THE OPERATIONAL CORRIDOR WILL BE RESTORED AS PFO WETLANDS. PFO WETLANDS WITHIN THE OPERATIONAL CORRIDOR WILL BE RESTORED AS PEM WETLANDS.

MODAG WETLANDS IMPACTED WILL BE RESTORED AS MODAG WETLANDS.

I AM A DULY REGISTERED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT EXISTING CONDITIONS SHOWN WERE FIELD LOCATED AND PREPARED UNDER MY DIRECT SUPERVISION.

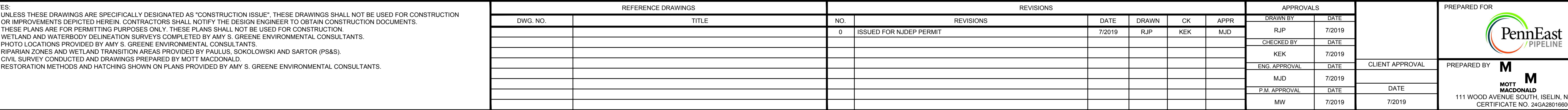
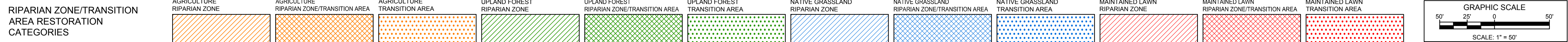
THOMAS D. STRONG
PROFESSIONAL LAND SURVEYOR
N.J. LIC. NO. 24GS03676100

Thomas D. Strong 08/01/2019
SIGNATURE DATE



















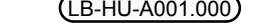
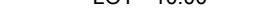

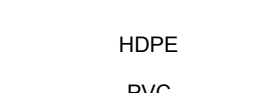


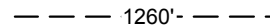





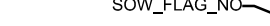


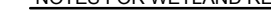


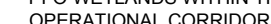
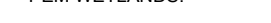



I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF NEW JERSEY AND I HEREBY CERTIFY THAT THE PROPOSED ENVIRONMENTAL DISTURBANCES SHOWN ARE ACCURATE AND CORRESPOND WITH THE DETAILED ENGINEERING DRAWINGS.

MICHAEL J. DENICHILO
PROFESSIONAL ENGINEER
N.J. LIC. NO. 24GE05078700

Michael J. Denichilo 08/01/2019
SIGNATURE DATE



LEGEND

	PROPOSED PIPELINE
	LIMITS OF DISTURBANCE
	PROPOSED PERMANENT EASEMENT
	OPERATIONAL CORRIDOR
	PROPOSED TREE LINE (DURING CONSTRUCTION AND BEFORE RESTORATION)
	EXISTING TREE LINE
	WETLAND (SURVEYED)
	WETLAND (PUBLIC)
	PEW WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
	PSS WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
	PFO WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
	MODAS WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
	WATERBODY (SURVEYED)
	WATERBODY (PUBLIC)
	WATERBODY - TO BE RESTORED
	TRANSITION AREA
	RIPARIAN BUFFER (OUTER LIMITS ONLY)
	STREAM CENTERLINE (SURVEYED)
	STREAM CENTERLINE (PUBLIC)
	LIMITS OF WETLAND DELINEATION
	PROPERTY LINE
	PARCEL ID WITH BLOCK AND LOT NUMBER
	EXISTING CULTIVR
	CMP CORRUGATED METAL PIPE
	HDPE HIGH DENSITY POLYETHYLENE PIPE
	PVC POLYVINYL CHLORIDE PIPE
	RCP REINFORCED CONCRETE PIPE
	UNK UNKNOWN
	EXISTING FOREIGN UTILITY EASEMENT
	EXISTING MAJOR CONTOURS
	EXISTING MINOR CONTOURS
	EXISTING PIPELINE
	EXISTING OVERHEAD LINE
	EXISTING TREE
	EXISTING FENCE
	WETLAND FLAG NO
	WETLAND FLAG
	SAMPLE STATION
	SOW_FLAG_NO
	STATE OPEN WATER FLAG
	PHOTO LOCATION (SEE REPORT)

NOTES FOR WETLAND RESTORATION

PEM WETLANDS IMPACTED WILL BE RESTORED AS PEM WETLANDS


PSS WETLANDS WITHIN THE LIMITS OF DISTURBANCE AND OUTSIDE OPERATIONAL CORRIDOR WILL BE RESTORED AS PSS WETLANDS. PSS WETLANDS WITHIN THE OPERATIONAL CORRIDOR WILL BE RESTORED AS PEM WETLANDS.

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MODAG WETLANDS IMPACTED WILL BE RESTORED AS MODAG WETLANDS.

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WERE FIELD LOCATED AND PREPARED UNDER MY DIRECT
SUPERVISION.

THOMAS D. STRONG
PROFESSIONAL LAND SURVEYOR
N.J. LIC. NO. 24GS03676100

 08/01/

SIGNATURE

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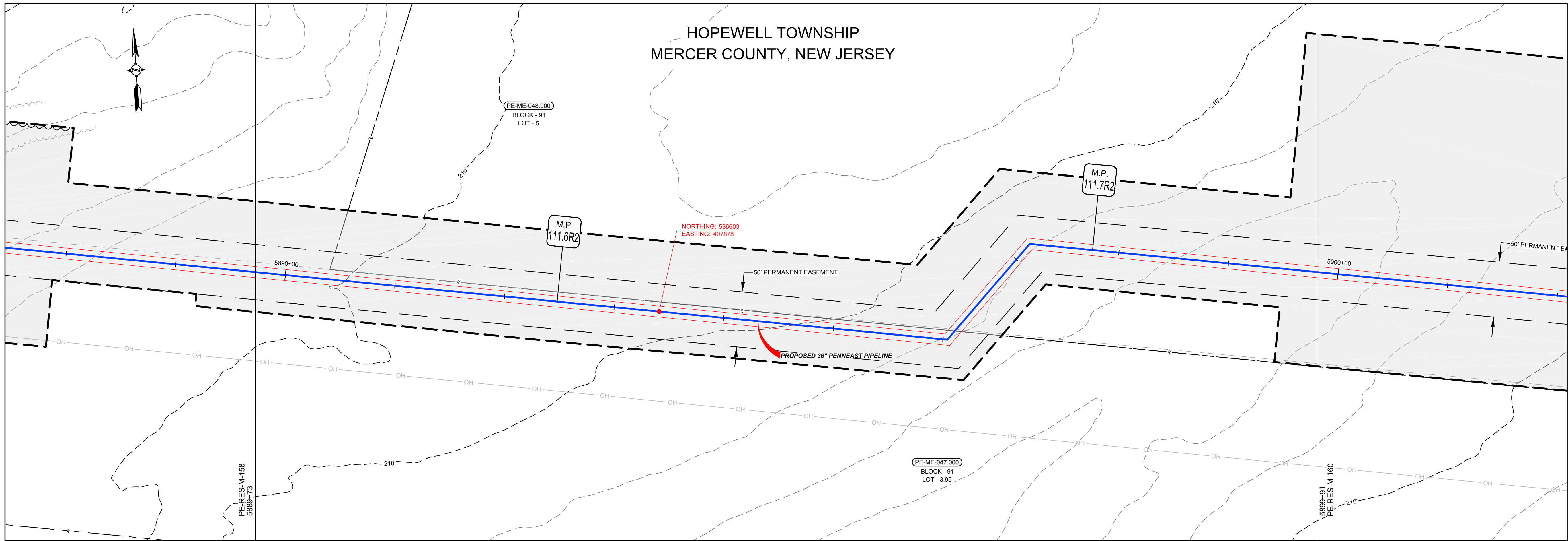
MICHAEL J. DENICHILO
PROFESSIONAL ENGINEER
N.J. LIC. NO. 24GE05078700

 08/01/2018

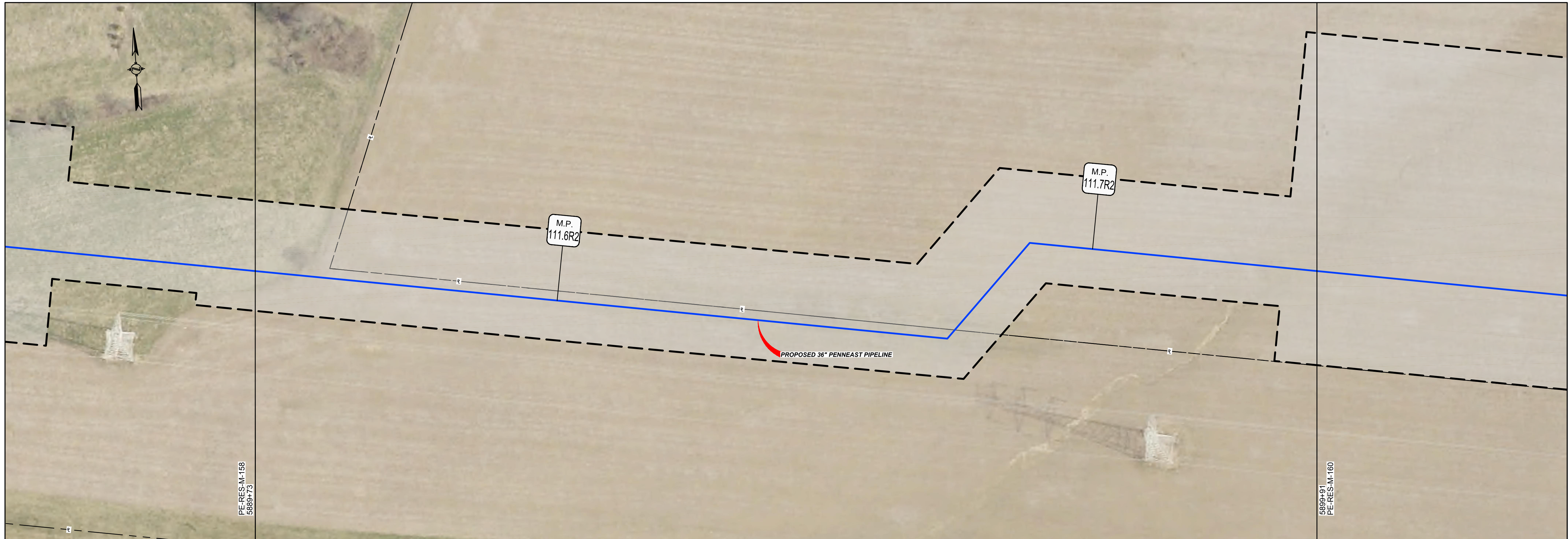
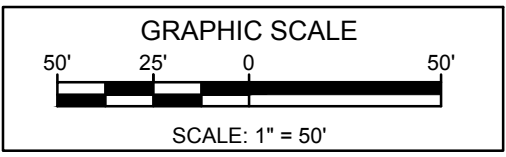
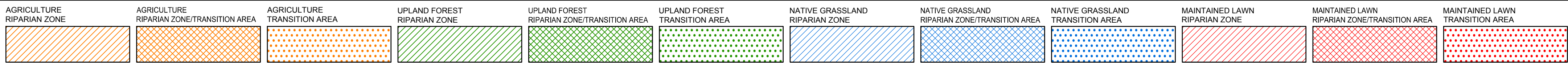
PENNEAST PIPELINE PROJECT

PENNEAST PIPELINE
RESTORATION PERMIT PLAN
MP 111.4R2 - MP 111.5F

SCALE	DRAWING NO.	REVISION
1" = 50'	PE-RES-M-158	



RIPIARIAN ZONE/TRANSITION
AREA RESTORATION
CATEGORIES



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DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN	CK	APPR	
		0	ISSUED FOR NJDEP PERMIT	7/2019	RJP	KEK	MJD	

APPROVALS	
DRAWN BY	DATE
RJP	7/2019
CHECKED BY	DATE
KEK	7/2019
ENG. APPROVAL	DATE
MJD	7/2019
P.M. APPROVAL	DATE
MW	7/2019

APPROVALS	
CLIENT APPROVAL	DATE

PREPARED FOR	
PREPARED BY	
111 WOOD AVENUE SOUTH, ISELIN, NJ, 08830	
CERTIFICATE NO. 24GA28016800	

LEGEND	
	PROPOSED PIPELINE
	LIMITS OF DISTURBANCE
	PROPOSED PERMANENT EASEMENT
	OPERATIONAL CORRIDOR
	PROPOSED TREE LINE (DURING CONSTRUCTION AND BEFORE RESTORATION)
	EXISTING TREE LINE
	WETLAND (SURVEYED)
	WETLAND (PUBLIC)
	PEM WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
	PSS WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
	PFO WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
	MODAG WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
	WATERBODY (SURVEYED)
	WATERBODY (PUBLIC)
	WATERBODY - TO BE RESTORED
	TRANSITION AREA
	RIPIARIAN BUFFER (OUTER LIMITS ONLY)
	STREAM CENTERLINE (SURVEYED)
	STREAM CENTERLINE (PUBLIC)
	LIMITS OF WETLAND DELINEATION
	PROPERTY LINE
	PARCEL ID WITH BLOCK AND LOT NUMBER
	EXISTING CULVERT
	CORRUGATED PLASTIC PIPE
	CORRUGATED METAL PIPE
	HIGH DENSITY POLYETHYLENE PIPE
	POLYVINYL CHLORIDE PIPE
	REINFORCED CONCRETE PIPE
	UNKNOWN
	EXISTING FOREIGN UTILITY EASEMENT
	EXISTING MAJOR CONTOURS
	EXISTING MINOR CONTOURS
	EXISTING PIPELINE
	EXISTING OVERHEAD LINE
	EXISTING TREE
	EXISTING FENCE
	WETLAND FLAG
	SAMPLE STATION
	STATE OPEN WATER FLAG
	PHOTO LOCATION (SEE REPORT)

NOTES FOR WETLAND RESTORATION:

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THOMAS D. STRONG
PROFESSIONAL LAND SURVEYOR
N.J. LIC. NO. 24GS03676100

SIGNATURE

08/01/2019
DATE

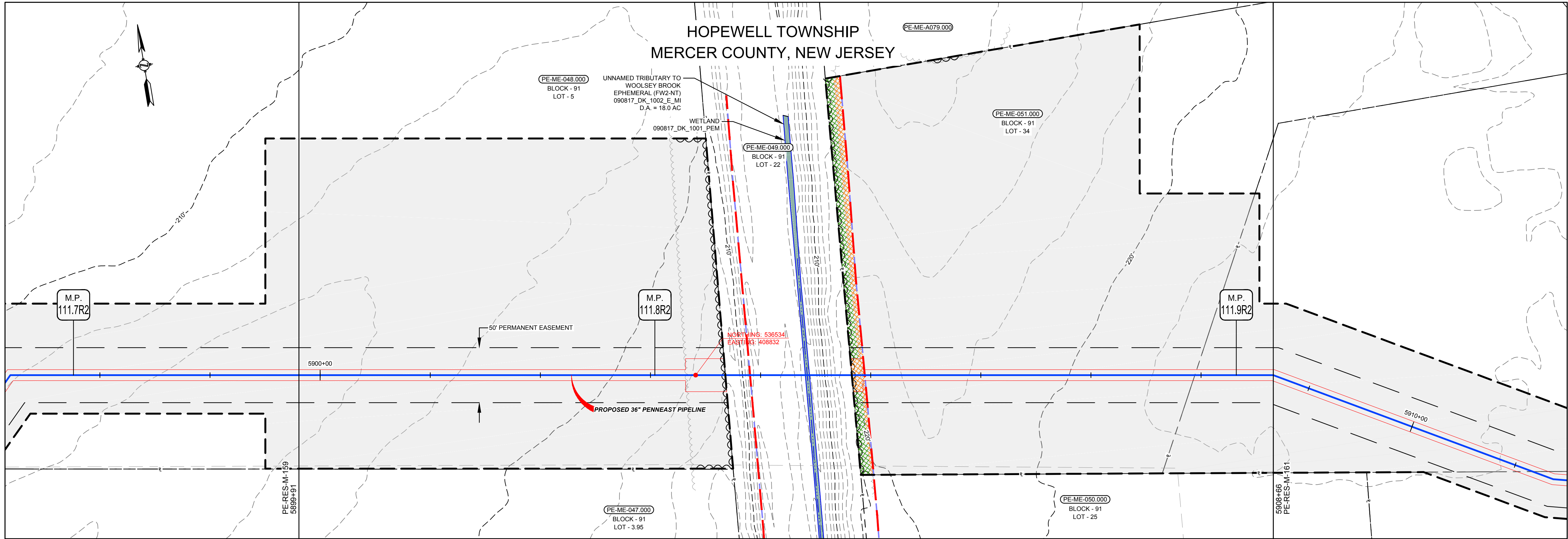
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MICHAEL J. DENICHILO
PROFESSIONAL ENGINEER
N.J. LIC. NO. 24GE05078700

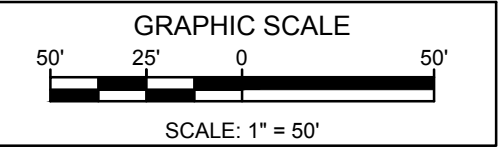
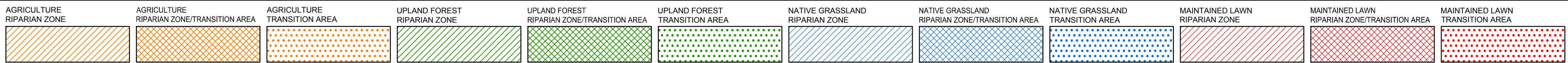
SIGNATURE

08/01/2019
DATE

PENNEAST PIPELINE PROJECT		
PENNEAST PIPELINE RESTORATION PERMIT PLAN MP 111.5R2 - MP 111.7R2		
SCALE	DRAWING NO.	REVISION
1" = 50'	PE-RES-M-159	0



RIPIARIAN ZONE/TRANSITION
AREA RESTORATION
CATEGORIES



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DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN	CK	APPR		
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APPROVALS		CLIENT APPROVAL	DATE
DRAWN BY	DATE		
RJP	7/2019		
CHECKED BY	DATE		
KEK	7/2019		
ENG. APPROVAL	DATE		
MJD	7/2019		
P.M. APPROVAL	DATE		
MW	7/2019		

PREPARED FOR	
PREPARED BY	
111 WOOD AVENUE SOUTH, ISELIN, NJ, 08830	CERTIFICATE NO. 24GA28016800

LEGEND

- PROPOSED PIPELINE
- LIMITS OF DISTURBANCE
- PROPOSED PERMANENT EASEMENT
- OPERATIONAL CORRIDOR
- PROPOSED TREE LINE (DURING CONSTRUCTION AND BEFORE RESTORATION)
- EXISTING TREE LINE
- WETLAND (SURVEYED)
- WETLAND (PUBLIC)
- PEM WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
- PSS WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
- PFO WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
- MODAG WETLAND - TO BE RESTORED (SEE NOTES FOR WETLAND RESTORATION BELOW)
- WATERBODY (SURVEYED)
- WATERBODY (PUBLIC)
- WATERBODY - TO BE RESTORED
- TRANSITION AREA
- RIPIARIAN BUFFER (OUTER LIMITS ONLY)
- STREAM CENTERLINE (SURVEYED)
- STREAM CENTERLINE (PUBLIC)
- LIMITS OF WETLAND DELINEATION
- PROPERTY LINE
- PARCEL ID WITH BLOCK - 1 LOT - 10.00
- EXISTING CULVERT
- CORRUGATED PLASTIC PIPE
- CORRUGATED METAL PIPE
- HDPPE
- PVC
- RCP
- UNKNOWN
- EXISTING FOREIGN UTILITY EASEMENT
- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- EXISTING PIPELINE
- EXISTING OVERHEAD LINE
- EXISTING TREE
- EXISTING FENCE
- WETLAND FLAG NO. 1
- SAMPLE STATION
- SOW_FLAG_NO. 1
- STATE OPEN WATER FLAG
- PHOTO LOCATION (SEE REPORT)

NOTES FOR WETLAND RESTORATION:

PEM WETLANDS IMPACTED WILL BE RESTORED AS PEM WETLANDS*

PSS WETLANDS WITHIN THE LIMITS OF DISTURBANCE AND OUTSIDE THE OPERATIONAL CORRIDOR WILL BE RESTORED AS PSS WETLANDS. PSS WETLANDS WITHIN THE OPERATIONAL CORRIDOR WILL BE RESTORED AS PEM WETLANDS.

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THOMAS D. STRONG
PROFESSIONAL LAND SURVEYOR
N.J. LIC. NO. 24GS03676100

08/01/2019
SIGNATURE DATE

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MICHAEL J. DENICHILO
PROFESSIONAL ENGINEER
N.J. LIC. NO. 24GE05078700

08/01/2019
SIGNATURE DATE

PENNEAST PIPELINE PROJECT		
PENNEAST PIPELINE RESTORATION PERMIT PLAN MP 111.7R2 - MP 111.9R2		
SCALE	DRAWING NO.	REVISION
1" = 50'	PE-RES-M-160	0